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NEW ZEALAND OFFICIAL YEAR-BOOK, 1903.

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THE

NEW ZEALAND

OFFICIAL YEAR-BOOK

1903.

TWELFTH YEAR OF ISSUE.

PREPARED UNDER INSTRUCTIONS FROM THE

RIGHT HONOURABLE R. J. SEDDON, P.C.,

PRIME MINISTER.

BY

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E. J. VON DADELSZEN,

REGISTRAR-GENERAL.

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PREFACE.

THIS is the twelfth issue of the New Zealand Official Year-book.

Thirteen pamphlets of "Advance Sheets" have been already published, which together form the whole of the work.

The Introductory and Official Part was included in the first of these pamphlets; the eight following contained the statistical information belonging to Part II.; and the last four were devoted to the descriptive portion of the book.

All these pamphlets have been circulated as far as deemed necessary in the colony, and a full supply of each was forwarded to the Agent-General in London as soon as issued.

E. J. VON DADELSZEN.

Registrar-General's Office,
Wellington, N.Z., 30th September, 1903.

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New Zealand is, besides, a mining country. Large deposits of coal are met with, chiefly on the west coast of the Middle Island. Gold, alluvial and in quartz, is found in both islands, the yield having been over sixty-one millions sterling in value to the present time. Full statistical information on this subject is given further on, compiled up to the latest dates.

Discovery and Early Settlement.

The first authentic account of the discovery of New Zealand is that given by Abel Jansen Tasman, the Dutch navigator. He left Batavia on the 14th August, 1642, in the yacht "Heemskirk," accompanied by the "Zeehaen" (or "Sea-hen") fly-boat. After having visited Mauritius, and discovered Tasmania, named by him "Van Diemen's Land," in honour of Anthony van Diemen, Governor of the Dutch possessions in the East Indies, he steered eastward, and on the 13th December of the same year sighted the west coast of the Middle Island of New Zealand, described by him as "a high mountainous country, which is at present marked in the charts as New Zealand."

Tasman, under the belief that the land he saw belonged to a great polar continent, and was part of the country discovered some years before by Schouten and Le Maire, to which the name of Staaten Land had been given, gave the same name of Staaten Land to New Zealand; but within about three months afterwards Schouten's "Staaten Land" was found to be merely an inconsiderable island. Upon this discovery being announced, the country that Tasman had called Staaten Land received again the name of "New Zealand," by which it has ever since been known. Tasman sailed along the coast to a bay, where he anchored. To this he gave the name of Murderers (now Massacre) Bay, on account of an unprovoked attack on a boat's crew by the natives, and the massacre of four white men. Thence he steered along the west coast of the North Island, and gave the name of Cape Maria van Diemen to the north-western extremity thereof. After sighting the islands of the Three Kings he finally departed, not having set foot in the country.

There is no record of any visit to New Zealand after Tasman's departure until the time of Captain Cook, who, after leaving the Society Islands, sailed in search of a southern continent then believed to exist. He sighted land on the 6th October, 1769, at Young Nick's Head, and on the 8th of that month cast anchor in Poverty Bay. After having coasted round the North Island and the Middle and Stewart Islands—which last he mistook for part of the Middle Island—he took his departure from Cape Farewell on the 31st March, 1770, for Australia. He visited New Zealand again in 1773, in 1774, and in 1777.

M. de Surville, a French officer in command of the vessel "Saint Jean Baptiste," while on a voyage of discovery, sighted the north-east coast of New Zealand on the 12th December, 1769, and re-

mained for a short time. A visit was soon after paid by another French officer, M. Marion du Fresne, who arrived on the west coast of the North Island of New Zealand on the 24th March, 1772, but was, on the 12th June following, treacherously murdered at the Bay of Islands by the Natives.

In 1793 the "Dædalus," under the command of Lieutenant Hanson, was sent by the Government of New South Wales to New Zealand, and two chiefs were taken thence to Norfolk Island. There was after this an occasional intercourse between the islands of New Zealand and the English settlements in New South Wales.

In 1814 the first missionaries arrived in New Zealand—Messrs. Hall and Kendall—who had been sent as forerunners by Mr. Marsden, chaplain to the New South Wales Government. After a short stay they returned to New South Wales, and on the 19th November of that year again embarked in company with Mr. Marsden, who preached his first sermon in New Zealand on Christmas Day, 1814. He returned to Sydney on the 23rd March, 1815, leaving Messrs. Hall and Kendall, who formed the first mission station at Rangihoua, Bay of Islands, under the auspices of the Church Missionary Society. Six years later, in 1821, the work of evangelization was put on a more durable basis; but the first station of the Wesleyan mission, established by Mr. Leigh and his wife, at the valley of the Kaeo, Whangaroa, was not taken possession of until the 10th June, 1823.

Colonisation.

The first attempt at colonisation was made in 1825 by a company formed in London. An expedition was sent out under the command of Captain Herd, who bought two islands in the Hauraki Gulf and a strip of land at Hokianga. The attempt, however, was a failure, owing to the savage character of the inhabitants. In consequence of frequent visits of whaling-vessels to the Bay of Islands, a settlement grew up at Kororareka—now called Russell—and in 1833 Mr. Busby was appointed British Resident there. A number of Europeans gradually settled in different parts of the country, and married Native women.

In 1838 a colonisation company, known as the New Zealand Company, was formed to establish settlement on systematic principles. A preliminary expedition, under the command of Colonel William Wakefield, was despatched from England on the 12th May, 1839, and arrived in New Zealand in the following August. Having purchased land from the Natives, Colonel Wakefield selected the shore of Port Nicholson, in Cook Strait, as the site of the first settlement. On the 22nd January, 1840, the first body of immigrants arrived, and founded the town of Wellington. About the same time—namely, on the 29th January, 1840—Captain Hobson, R.N., arrived at the Bay of Islands, empowered, with the consent of the Natives, to proclaim the sovereignty of Queen Victoria over the

islands of New Zealand, and to assume the government thereof. A compact called "The Treaty of Waitangi," to which in less than six months five hundred and twelve names were affixed, was entered into, whereby all rights and powers of sovereignty were ceded to the Queen, all territorial rights being secured to the chiefs and their tribes. New Zealand was then constituted a dependency of the Colony of New South Wales, but on the 3rd May, 1841, was proclaimed a separate colony. The seat of Government had been previously established at Waitemata (Auckland), round which a settlement was formed.

The New Zealand Company having decided to form another settlement, to which the name of "Nelson" was to be given, despatched a preliminary expedition from England in April, 1841, for the purpose of selecting a site. The spot chosen was the head of Blind Bay, where a settlement was established. About the same time a number of pioneers arrived in Taranaki, despatched thither by the New Plymouth Company, a colonising society which had been formed in England, and had bought 50,000 acres of land from the New Zealand Company.

The next important event in the progress of colonisation was the arrival at Port Chalmers, on the 23rd March, 1848, of the first of two emigrant ships sent out by the Otago Association for the foundation of a settlement by persons belonging to or in sympathy with the Free Church of Scotland.

In 1849 the "Canterbury Association for founding a Settlement in New Zealand" was incorporated. On the 16th December, 1850, the first emigrant ship despatched by the association arrived at Port Cooper, and the work of opening up the adjoining country was set about in a systematic fashion, the intention of the promoters being to establish a settlement complete in itself, and composed entirely of members of the then United Church of England and Ireland.

The Maoris.

Prior to the colonisation of New Zealand by Europeans, the earliest navigators and explorers found a race of people already inhabiting both islands. Papers written in 1874 by Mr. (afterwards Sir) William Fox, and Sir Donald McLean, then Native Minister, state that at what time the discovery of these islands was made by the Maoris, or from what place they came, are matters of tradition only, and that much has been lost in the obscurity enveloping the history of a people without letters. Nor is there anything on record respecting the origin of the Maori people themselves, beyond the general tradition of the Polynesian race, which seems to show a series of successive migrations from west to east, probably by way of Malaysia to the Pacific. Little more can now be gathered from their traditions than that they were immigrants, and that they probably found inhabitants on the east coast of the North Island belonging to the same race as themselves—the descendants of a prior migration, whose history is lost. The tradition runs

that, generations ago, the Maoris dwelt in a country named Hawaiki, and that one of their chiefs, after a long voyage, reached the northern island of New Zealand. Returning to his home with a flattering description of the country he had discovered, this chief, it is said, persuaded a number of his kinsfolk and friends, who were much harassed by war, to set out with a fleet of double canoes for the new land. The names of most of the canoes are still remembered, and each tribe agrees in its account of the doings of the people of the principal canoes after their arrival in New Zealand; and from these traditional accounts the descent of the numerous tribes has been traced. Calculations, based on the genealogical staves kept by the *tohungas*, or priests, and on the well-authenticated traditions of the people, indicate that about twenty-one generations have passed since the migration, which may therefore be assumed to have taken place about five hundred and twenty-five years ago. The position of the legendary Hawaiki is unknown, but many places in the South Seas have been thus named in memory of the motherland. The Maoris speak a very pure dialect of the Polynesian language, the common tongue, with more or less variation, in all the Eastern Pacific Islands. When Captain Cook first visited New Zealand he availed himself of the services of a native from Tahiti, whose speech was easily understood by the Maoris. In this way much information respecting the early history of the country and its inhabitants was obtained which could not have otherwise been had.

For results of recent researches as to probable origin and present numbers of the Maoris, see Year-book for 1901.

Boundaries and Area.

The Proclamation of Captain Hobson on the 30th January, 1840, gave as the boundaries of the colony the following degrees of latitude and longitude: On the north, 34° 30′ S. lat.; on the south, 47° 10′ S. lat.; on the east, 179° 0′ E. long.; on the west, 166° 5′ E. long. These limits excluded small portions of the extreme north of the North Island and of the extreme south of Stewart Island.

In April, 1842, by Royal Letters Patent, and again by the Imperial Act 26 and 27 Vict., c. 23 (1863), the boundaries of the colony were altered so as to extend from 33° to 53° of south latitude and from 162° of east longitude to 173° of west longitude. By Proclamation bearing date the 21st July, 1887, the Kermadec Islands, lying between the 29th and 32nd degrees of south latitude and the 177th and 180th degrees of west longitude, were declared to be annexed to and to become part of the Colony of New Zealand.

By Proclamation bearing date the 10th June, 1901, the Cook Group of islands, and all the other islands and territories situate within the boundary-lines mentioned in the following Schedule, were included in the Colony of New Zealand:—

A line commencing at a point at the intersection of the twenty-third degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich, and proceeding due north to the point of intersection of the eighth degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich; thence due west to the point of intersection of the eighth degree of south latitude and the one-hundred-and-sixty-seventh degree of longitude west of Greenwich; thence due south to the point of intersection of the seventeenth degree of south latitude and the one-hundred-and-sixty-seventh degree of longitude west of Greenwich; thence due west to the point of intersection of the seventeenth degree of south latitude and the one-hundred-and-seventieth degree of longitude west of Greenwich; thence due south to the point of intersection of the twenty-third degree of south latitude and the one-hundred-and-seventieth degree of longitude west of Greenwich; and thence due east to the point of intersection of the twenty-third degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich.

The following now constitute the Colony of New Zealand:—

1. The island commonly known as the North Island, with its adjacent islets, having an aggregate area of 44,468 square miles, or 28,459,520 acres.

2. The island known as the Middle Island, with adjacent islets, having an aggregate area of 58,525 square miles, or 37,456,000 acres.

3. Stewart Island, and adjacent islets, having an area of 665 square miles, or 425,390 acres.

4. The Chatham Islands, situate 536 miles eastward of Lyttelton in the Middle Island, with an area of 375 square miles, or 239,920 acres.

5. The Auckland Islands, about 200 miles south of Stewart Island, extending about 30 miles from north to south, and nearly 15 from east to west, the area being 210,650 acres.

6. The Campbell Islands, in latitude 52° 33′ south, and longitude 169° 8′ west, about 30 miles in circumference, with an area of 45,440 acres.

7. The Antipodes Islands, about 458 miles in a south-easterly direction from Port Chalmers, in the Middle Island. These are detached rocky islands, and extend over a distance of between 4 and 5 miles from north to south. Area, 12,960 acres.

8. The Bounty Islands, a small group of islets, thirteen in number, lying north of the Antipodes Islands, and about 415 miles in an east-south-easterly direction from Port Chalmers. Area, 3,300 acres.

9. The Kermadec Islands, a group lying about 614 miles to the north-east of Russell, in the Bay of Islands. Raoul or Sunday Island, the largest of these, is about 20 miles in circuit. The next in size is Macaulay Island, about 3 miles round. Area of the group, 8,208 acres.

10. Islands forming the Cook Group:—

Rarotonga.—Distance from Auckland, 1,638 miles; circumference, 20 miles; height, 2,920 ft.

Mangaia. — Distance from Rarotonga, 116 miles; circumference, 30 miles; height, 656 ft.

Atiu.—Distance from Rarotonga, 116 miles: circumference, 20 miles; height, 374 ft.

Aitutaki. — Distance from Rarotonga, 140 miles; circumference, 12 miles; height, 366 ft.
Mauke.—Distance from Rarotonga, 150 miles; circumference, 6 miles; height, about 60 ft.
Mitiaro.—Distance from Rarotonga, 140 miles; circumference, 5 miles; height, about 50 ft; also,
Takutea.—Distant from Rarotonga, 125 miles.
The Herveys (*Manuae* and *Aoutu*).—Distant from Rarotonga, 120 miles.

Total area of above group, 150 square miles.

11. Islands outside the Cook Group:—

Savage or Niue.—Distance from Rarotonga, 580 miles; circumference, 40 miles; height, 200 ft.; area, about 100 square miles.
Palmerston.—Distance from Rarotonga, 273 miles; an atoll, 4 miles by 2 miles.
Penrhyn, or *Tongareva.*—Distance 735 miles from Rarotonga; an atoll, 12 miles by 7 miles.
Humphrey, or *Manahiki.*—Distance from Rarotonga, 650 miles; an atoll, 6 miles by 5 miles.
Rierson, or *Rakaanga.*—Distance from Rarotonga, 670 miles; an atoll, 3 miles by 3 miles.
Danger, or *Pukapuka.*—Distance from Rarotonga, 700 miles; an atoll, 3 miles by 3 miles.
Suwarrow.—Distance from Rarotonga, 530 miles; an atoll.

Total area of islands outside the Cook Group, 130 square miles.

The total area of the colony is thus about 104,751 square miles, of which the aggregate area of the outlying groups of islands that are practically useless for settlement amounts to about 498 square miles.

Area of the Commonwealth States of Australia.

The areas of the several Australian States, as stated by different authorities, vary considerably. The total area of the Australian Continent is given as 2,944,628 square miles, according to a computation made by the late Surveyor-General of Victoria, Mr. J. A. Skene, from a map of Continental Australia compiled and engraved under his direction; but the following areas are taken from the latest official records of each colony:—

	Square Miles.
Queensland	668,497
New South Wales	310,700
Victoria	87,884
South Australia	903,690
Western Australia	975,920
Total, Continent of Australia	2,946,691
Tasmania	26,215
Total, Commonwealth of Australia ..	2,972,906

The size of these States (with New Zealand) may be better realised by comparison of their areas with those of European countries. The areas of the following countries—Austria-Hungary, Germany, France, Belgium, Holland, Denmark, Sweden and Norway, Portugal, Spain, Italy (including Sardinia and Sicily), Switzerland, Greece,

Roumania, Bulgaria, Servia, Eastern Roumelia, and Turkey in Europe—containing on the whole rather less than 1,600,000 square miles, amount to little more than half the extent of the Australian Continent. If the area of Russia in Europe be added to those of the other countries the total would be about one-seventh larger than the Australian Continent, and about one-twelfth larger than the Australian States, with New Zealand.

Area of the Colony of New Zealand.

The area of the Colony of New Zealand is about one-seventh less than the area of Great Britain and Ireland, the Middle Island of New Zealand being a little larger than the combined areas of England and Wales.

United Kingdom.	Area in Square Miles.
England and Wales	58,311
Scotland	30,463
Ireland	32,531
Total	121,305

New Zealand.	Area in Square Miles.
North Island	44,468
Middle Island	58,525
Stewart Island	665
Chatham Islands	375
Other islands	718
Total	104,751

PHYSICAL FEATURES OF THE NORTH ISLAND.

The North Island extends over a little more than seven degrees of latitude, a distance in a direct line from north to south of 430 geographical or 498 statute miles; but, as the northern portion of the colony, which covers more than three degrees of latitude, trends to the westward, the distance in a straight line from the North Cape to Cape Palliser, the extreme northerly and southerly points of the island, is about 515 statute miles.

This island is, as a whole, hilly, and, in parts, mountainous in character, but there are large areas of plain or comparatively level country that are, or by clearing may be made, available for agricultural purposes. Of these, the principal are the plains in Hawke's Bay on the East Coast, the Wairarapa Plain in the Wellington District, and a strip of country along the West Coast, about 250 miles in length, extending from a point about thirty miles from the City of Wellington to a little north of New Plymouth. The largest plain in the North Island, Kaingaroa, extends from the shore of Lake Taupo in a north-north-easterly direction to the sea-coast in the Bay of Plenty; but a great part of it is covered with pumice-sand, and is unfit for tillage or pasture. There are several smaller plains and numerous valleys suitable for agriculture. The level or

undulating country in this island fit, or capable of being made fit, for agriculture has been roughly estimated at 13,000,000 acres. This includes lands now covered with standing forest, and swamps that can be drained; also large areas of clay-marl and pumice-covered land. The clay-marl in its natural state is cold and uninviting to the farmer, but under proper drainage and cultivation it can be brought to a high state of productiveness. This kind of land is generally neglected at the present time, as settlers prefer soils more rapidly remunerative and less costly to work. The larger portion of the North Island was originally covered with forest. Although the area of bush-land is still very great, yet year by year the amount is being reduced, chiefly to meet the requirements of settlement, the trees being cut down and burnt, and grass-seed sown on the ashes to create pasture. Hilly as the country is, yet from the nature of the climate it is especially suited for the growth of English grasses, which will flourish wherever there is any soil, however steep the land may be; once laid down in grass very little of the land is too poor to supply food for cattle and sheep. The area of land in the North Island deemed purely pastoral or capable of being made so, while too steep for agricultural purposes, is estimated at 14,200,000 acres. In the centre of the island is a lake, about twenty miles across either way, called Taupo. A large area adjacent to the lake is at present worthless pumice-country. The Waikato River, the largest in the North Island, flows out of the north-eastern corner of this lake, and runs thence north-westward until it enters the ocean a little distance south of the Manukau Harbour. This river is navigable for small steamers for about a hundred miles from its mouth. The Maori King-country, occupied by Natives who for several years isolated themselves from Europeans, lies between Lake Taupo and the western coast. The River Thames, or Waihou, having its sources north of Lake Taupo, flows northward into the Firth of Thames. It is navigable for about fifty miles, but only for small steamers. The other navigable rivers in this island are the Wairoa (Kaipara), the Wanganui, and the Manawatu, the two last of which flow towards the south-west into Cook Strait.

The mountains in the North Island are estimated to occupy about one-tenth of the surface, and do not exceed 4,000ft. in height, with the exception of a few volcanic mountains that are more lofty. Of these, the three following are the most important:—

1. The Tongariro Mountain, situated to the southward of Lake Taupo. It consists of a group of distinct volcanic cones, the lava-streams from which have so overlapped in their descent as to form one compact mountain-mass at the base. The highest of these cones is called Ngauruhoe, and attains an elevation of 7,515ft. The craters of Ngauruhoe, the Red Crater (6,140ft.), and Te Mari (4,990ft.) are the three vents from which the latest discharges of lava have taken place, the most recent having occurred in 1868. These craters are still active, steam and vapour issuing from them

with considerable force and noise, the vapours, charged with pungent gases and acids, making it dangerous to approach too near the crater-lips.

2. Ruapehu. This mountain lies to the south of Ngauruhoe and Tongariro. It is a volcanic cone in the solfatara stage, and reaches the height of 9,008ft., being in part considerably above the line of perpetual snow. The most remarkable feature of this mountain is the crater-lake on its summit, which is subject to slight and intermittent eruptions, giving rise to vast quantities of steam. Recently —in March, 1895—such an eruption took place, forming a few hot springs on the margin of the lake, and increasing the heat in the lake itself. This lake lies at the bottom of a funnel-shaped crater, the steep sides of which are mantled with ice and snow. The water occupies a circular basin about 500ft. in diameter, some 300ft. below the enclosing peaks, and is quite inaccessible except by the use of ropes. This lake, and the three craters previously mentioned on Tongariro, are all in one straight line, which, if produced, would pass through the boiling springs at Tokaanu on the southern margin of Lake Taupo, the volcanic country north-east of that lake, and White Island, an active volcano in the Bay of Plenty, situated about twenty-seven miles from the mainland.

3. Mount Egmont. This is an extinct volcanic cone, rising to a height of 8,260ft. The upper part is always covered with snow. This mountain is situated close to New Plymouth, and is surrounded by one of the most fertile districts in New Zealand. Rising from the plains in solitary grandeur, it is an object of extreme beauty, the cone being one of the most perfect in the world.

It is estimated that the area of mountain-tops and barren country at too high an altitude for sheep, and therefore worthless for pastoral purposes, amounts, in the North Island, to 300,000 acres.

Without a doubt the hot springs form the most remarkable feature of the North Island. They are found over a large area, extending from Tongariro, south of Lake Taupo, to Ohaeawai, in the extreme north—a distance of some 300 miles; but the principal seat of hydrothermal action appears to be in the neighbourhood of Lake Rotorua, about forty miles north-north-east from Lake Taupo. By the destruction of the famed Pink and White Terraces and of Lake Rotomahana during the eruption of Mount Tarawera on the 10th June, 1886, the neighbourhood has been deprived of attractions unique in character and of unrivalled beauty; but the natural features of the country—the numerous lakes, geysers, and hot springs, some of which possess remarkable curative properties in certain complaints—are still very attractive to tourists and invalids. The world-wide importance of conserving this region as a sanatorium for all time has been recognised by the Government, and it is now dedicated by Act of Parliament to that purpose.

Notwithstanding the length of coast-line, good harbours in the North Island are not numerous. Those on the west coast north of New Plymouth are bar-harbours, unsuitable for large vessels. The

principal harbours are the Waitemata Harbour, on which Auckland is situated—this is rather a deep estuary than a harbour; several excellent havens, in the northern peninsula; and Port Nicholson, on the borders of which Wellington is situated. This is a land-locked harbour, about six miles across, having a comparatively narrow but deep entrance from the ocean. The water is deep nearly throughout.

The Cape Colville Peninsula is rich in gold-bearing quartz.

Cook Strait.

Cook Strait separates the North and Middle Islands. It is some sixteen miles across at its narrowest part, but in the widest about ninety. The strait is invaluable for the purpose of traffic between different parts of the colony.

Physical Features of the Middle Island.

The extreme length of the Middle Island, from Jackson's Head, in Cook Strait, to Puysegur Point, at the extreme south-west, is about 525 statute miles; the greatest distance across at any point is in Otago (the southernmost) District, about 180 miles.

The Middle Island is intersected along almost its entire length by a range of mountains known as the Southern Alps. Some of the summits reach a height of from 10,000ft. to 12,000ft., Mount Cook, the highest peak, rising to 12,349ft.

In the south, in the neighbourhood of the sounds and Lake Te Anau, there are many magnificent peaks, which, though not of great height, are, owing to their latitude, nearly all crowned with perpetual ice and snow. Further north the mountains increase in height—Mount Earnslaw, at Lake Wakatipu; and Mount Aspiring, which has been aptly termed the New Zealand Matterhorn, 9,949 ft. in height, at Lake Wanaka. Northward of this again are Mount Cook (or Aorangi), Mount Sefton, and other magnificent peaks.

For beauty and grandeur of scenery the Southern Alps of New Zealand may worthily compare with, while in point of variety they are said actually to surpass, the Alps of Switzerland. In New Zealand few of the mountains have been scaled; many of the peaks and most of the glaciers are as yet unnamed; and there is still, in parts of the Middle Island, a fine field for exploration and discovery—geographical, geological, and botanical. The wonders of the Southern Alps are only beginning to be known; but the more they are known the more they are appreciated. The snow-line in New Zealand being so much lower than in Switzerland, the scenery, though the mountains are not quite so high, is of surpassing grandeur.

There are extensive glaciers on both sides of the range, those on the west being of exceptional beauty, as, from the greater abruptness of the mountain-slopes on that side, they descend to within about 700ft. of the sea-level, and into the midst of the evergreen forest. The largest glaciers on either side of the range are easily accessible.

The following gives the sizes of some of the glaciers on the eastern slope:—

Name.	Area of Glacier.	Length of Glacier.	Greatest Width.	Average Width.
	Acres.	Miles ch.	Miles ch.	Miles ch.
Tasman	13,664	18 0	2 14	1 15
Murchison	5,800	10 70	1 5	0 66
Godley	5,312	8 0	1 55	1 3
Mueller	3,200	8 0	0 61	0 50
Hooker	2,416	7 25	0 54	0 41

The Alletsch Glacier in Switzerland, according to Ball, in the "Alpine Guide," has an average width of one mile. It is in length and width inferior to the Tasman Glacier.

Numerous sounds or fiords penetrate the south-western coast. They are long, narrow, and deep (the depth of water at the upper part of Milford Sound is 1,270ft., although at the entrance only 130ft.), surrounded by giant mountains clothed with foliage to the snow-line, with waterfalls, glaciers, and snowfields at every turn. Some of the mountains rise almost precipitously from the water's edge to 5,000ft. and 6,000ft. above the sea. Near Milford, the finest of these sounds, is the great Sutherland Waterfall, 1,904ft. high.

The general surface of the northern portion of the Middle Island, comprising the Provincial Districts of Nelson and Marlborough, is mountainous, but the greater part is suitable for grazing purposes. There are some fine valleys and small plains suitable for agriculture, of which the Wairau Valley or Plain is the largest. Deep sounds, extending for many miles, break the coast-line abutting on Cook Strait. The City of Nelson is situated at the head of Blind Bay, which has a depth inwards from Cook Strait of about forty statute miles.

The Provincial District of Canterbury lies to the south of the Marlborough District, and on the eastern side of the island. Towards the north the land is undulating; then there is a stretch of almost perfectly level country extending towards the south-west 160 miles, after which, on the south, the country is undulating as far as the borders of the Otago District. On the east a block of hill-country rises abruptly from the plain and extends for some miles seaward. This is Banks Peninsula, containing several good harbours, the principal being Port Cooper, on the north, on which is situated Lyttelton, the chief port of the district: the harbour of Akaroa, one of the finest in the colony, is on the southern coast of this peninsula.

The District of Otago is, on the whole, mountainous, but has many fine plains and valleys suitable for tillage. The mountains, except towards the west coast, are generally destitute of timber, and suitable for grazing sheep. There are goldfields of considerable

extent in the interior of this district. The inland lakes are also very remarkable features. Lake Wakatipu extends over fifty-four miles in length, but its greatest width is not more than four miles, and its area only 114 square miles. It is 1,070ft. above sea-level, and has a depth varying from 1,170ft. to 1,296ft. Te Anau Lake is somewhat larger, having an area of 132 square miles. These lakes are bounded on the west by broken, mountainous, and wooded country, extending to the ocean.

The chief harbours in Otago are Port Chalmers, at the head of which Dunedin is situated, and the Bluff Harbour, at the extreme south.

The District of Westland, extending along the west coast of the Middle Island, abreast of Canterbury, is more or less auriferous throughout. The western slopes of the central range of mountains are clothed with forest-trees to the snow-line; but on the eastern side timber is scarce, natural grasses covering the ground.

The rivers in the Middle Island are for the most part mountain torrents, fed by glaciers in the principal mountain ranges. When the snow melts they rise in flood, forming, where not confined by rocky walls, beds of considerable width, generally covered by enormous deposits of shingle. The largest river in the colony as regards volume of water is the Clutha. It is 154 miles in length, but is only navigable for boats or small river-steamers for about thirty miles. The Rivers Buller, Grey, and Hokitika, on the West Coast, are navigable for a short distance from their mouths. They form the only ports in the Westland District. In their unimproved state they admitted, owing to the bars at their mouths, none but vessels of small draught; but, in consequence of the importance of the Grey and Buller Rivers as the sole ports available for the coal-export trade, large harbour-works have been undertaken, resulting in the deepening of the beds of these rivers, and giving a depth of from 18ft. to 26ft. of water on the bar.

The area of level or undulating land in the Middle Island available for agriculture is estimated at about 15,000,000 acres. About 13,000,000 are suitable for pastoral purposes only, or may become so when cleared of forest and sown with grass-seed. The area of barren land and mountain-tops is estimated at about 9,000,000 acres.

Stewart Island.

Foveaux Strait separates the Middle from Stewart Island. This last island has an area of only 425,390 acres.

Stewart Island is a great tourist resort during the summer months, and is easily reached by steamer from the Bluff, distant about 25 miles.

The principal peak is Mount Anglem, 3,200 ft. above sea-level, which has an extinct crater at its summit. Most of the island is rugged and forest-clad; the climate is mild, frost being seldom experienced; and the soil, when cleared of bush, is fertile.

The chief attractions are the numerous bays and fiords. Paterson Inlet is a magnificent sheet of water, about ten miles by four miles, situated close to Half-moon Bay, the principal port, where over two hundred people live. Horse-shoe Bay and Port William are within easy reach of Half-moon Bay. Port Pegasus, a land-locked sheet of water about eight miles by a mile and a half, is a very fine harbour. At "The Neck" (Paterson Inlet) there is a Native settlement of over a hundred Maoris and half-castes. The bush is generally very dense, with thick undergrowth. Rata, black-pine, white-pine, miro, and totara are the principal timber trees. Fish are to be had in great abundance and variety; oysters form an important industry. Wild pigeons, ducks, and mutton-birds are plentiful.

The Outlying Islands.

The outlying group of the Chatham Islands, 480 statute miles east-south-east from Wellington, and 536 miles eastward of Lyttelton, consists of two principal islands and several unimportant islets. The largest island contains about 222,490 acres, of which an irregular-shaped lake or lagoon absorbs 45,960 acres. About one quarter of the surface of the land is covered with forest, the rest with fern or grass. The hills nowhere rise to a great height. Pitt Island is the next in size; the area is 15,330 acres. The greater portion of both islands is used for grazing sheep.

The Kermadec Group of islands, four in number, is situated between 29° 10′ and 31° 30′ south latitude, and between 177° 45′ and 179° west longitude. They are named Raoul or Sunday Island, Macaulay Island, Curtis Islands, and L'Espérance or French Rock. The principal island, Sunday, is 600 miles distant from Auckland. The islands are volcanic, and in two of them signs of activity are still to be seen. The rainfall is plentiful, but not excessive. The climate is mild and equable, and slightly warmer than the north of New Zealand. The following are the areas of the islands and islets of the group: Sunday Island, 7,200 acres; Herald group of islets, 85 acres; Macaulay Island, 764 acres; Curtis Islands, 128 acres and 19 acres; L'Espérance, 12 acres: total, 8,208 acres. Sunday Island is twenty miles in circumference, roughly triangular in shape, and at the highest point 1,723ft. above the sea-level. It is rugged and broken over a very large extent of its surface, and, except in a few places, covered with forest. The soil everywhere on the island is very rich, being formed by the decomposition of a dark-coloured pumiceous tuff and a black andesitic lava, with which is closely mixed a fine vegetable mould. The great luxuriance and richness of the vegetation bear witness to the excellence of the soil, which is everywhere—except where destroyed by eruptions, and on the steep cliffs—the same rich loam. Want of water is one of the drawbacks. Three of the four lakes on the island are fresh, but so difficult of approach as to be practically useless.

The AUCKLAND ISLANDS are about 290 miles south of Bluff Harbour, their position being given on the Admiralty chart as latitude 50° 31′ 29″ S., and longitude 166° 19′ 12″ E. They have several good harbours. Port Ross, at the north end of the principal island, was described by the eminent French commander, D'Urville, as one of the best harbours of refuge in the known world. At the southern end of the island there is a through passage extending from the east to the west coast. It has been variously named Adams Strait and Carnley Harbour, and forms a splendid sheet of water. The largest of the islands is about 27 miles long by about 15 miles broad, and is very mountainous, the highest part being about 2,000ft. above the sea. The west coast is bold and precipitous, but the east coast has several inlets. The wood on the island is, owing to the strong prevailing wind, scrubby in character. The New Zealand Government maintains at this island a dépôt of provisions and clothing for the use of shipwrecked mariners.

The COOK ISLANDS, with others recently annexed, are as under:—

RAROTONGA (Cook Group): A magnificent island, rising to a height of 3,000 ft., clothed to the tops of the mountains with splendid vegetation. It has abundant streams, considerable tracts of sloping land, and rich alluvial valleys. The two harbours are poor.

MANGAIA, the south-easternmost of the Cook Group, is of volcanic origin, and about thirty miles in circumference. The productions, which are numerous and cheap, are obtained by assiduous labour.

ATIU (Cook Group) resembles Mangaia in appearance and extent. It is a mere bank of coral, 10 ft. or 12 ft. high, steep and rugged, except where there are small sandy beaches and some clefts, where the ascent is gradual.

AITUTAKI (Cook Group) presents a most fruitful appearance, its shores being bordered by flat land, on which are innumerable cocoanut and other trees, the higher ground being beautifully interspersed with lawns. It is eighteen miles in circuit.

MAUKE or Parry Island (Cook Group) is a low island; it is about two miles in diameter, well wooded, and inhabited.

MITIARO (Cook Group) is a low island, from three to four miles long and one mile wide.

HERVEY ISLANDS (Cook Group): This group consists of three islands, surrounded by a reef, which may be six leagues in circumference.

NIUE, or Savage Island, lying east of the Friendly Islands, is a coral island, thirty-six miles in circumference, rising to a height of 200 ft. It has the usual tropical productions.

PALMERSTON ISLAND, lying about 500 miles east of Niue and about 220 from the nearest island of the Cook Group (Aitutaki), is remarkable as the "San Pablo" of Magellan, the first island discovered in the South Sea. It has no harbour. The soil is fairly fertile, and there is some good hardwood timber.

PENRHYN ISLAND (Tongareva) lies about 300 miles north-east of Manahiki. It is one of the most famous pearl islands in the Pacific, and there is a splendid harbour, a lagoon with two entrances, fit for ships of any size.

MANAHIKI, lying about 400 miles eastward of Danger Island, is an atoll, about thirty miles in circumference, valuable from the extent of the cocoanut groves. The interior lagoon contains a vast deposit of pearl-shell.

RAKAANGA is an atoll, three miles in length and of equal breadth.

DANGER ISLAND (Pukapuka): Next to the 10th parallel, but rather north of the latitude of the Navigators, and east of them are a number of small atolls. Of these, the nearest to the Samoan Group—about 500 miles—is Danger Island, bearing north-west of Suwarrow about 250 miles.

SUWARROW ISLAND has one of the best harbours in the Pacific. It lies about 500 miles east of Apia, the capital of the Samoan Group. It is a coral atoll, of a triangular form, fifty miles in circumference, the reef having an average width of half a mile across, enclosing a land-locked lagoon twelve miles by eight. The entrance is half a mile wide, and there is accommodation for all the ships in the Pacific to ride in safety in all weathers, with depths of from three to thirty fathoms. It is out of the track of hurricanes, uninhabited, but capable by its fertility of supporting a small population. As a depot for the collection of trade from the various islands it ought to be very valuable.

CONSTITUTION.

British sovereignty was proclaimed over New Zealand in January, 1840, and the country became a dependency of New South Wales until the 3rd May, 1841, when it was made a separate colony. The seat of Government was at Auckland, and the Executive included the Governor, and three gentlemen holding office as Colonial Secretary, Attorney-General, and Colonial Treasurer.

The successors of these gentlemen, appointed in August, 1841, May, 1842, and January, 1844, respectively, continued in office until the establishment of Responsible Government on the 7th May, 1856. Only one of them—Mr. Swainson, the Attorney-General—sat as a member of the first General Assembly, opened on the 27th May, 1854. During the session of that year there were associated with the permanent members of the Executive Council certain members of the General Assembly. These latter held no portfolios.

The Government of the colony was at first vested in the Governor, who was responsible only to the Crown; but in 1852 an Act granting representative institutions to the colony was passed by the Imperial Legislature. Under it the constitution of a General Assembly for the whole colony was provided for, to consist of a Legislative Council, the members of which were to be nominated by the Governor, and of an elective House of Representa-

tives. The first session of the General Assembly was opened on the 27th May, 1854, but the members of the Executive were not responsible to Parliament. The first Ministers under a system of Responsible Government were appointed on the 18th April, 1856. By the Act of 1852 the colony was divided into six provinces, each to be presided over by an elective Superintendent, and to have an elective Provincial Council, empowered to legislate, except on certain specified subjects. The franchise amounted practically to household suffrage. In each case the election was for four years, but a dissolution of the Provincial Council by the Governor could take place at any time, necessitating a fresh election both of the Council and of the Superintendent. The Superintendent was chosen by the whole body of electors of the province; each member of the Provincial Council by the electors of a district. The Provincial Governments, afterwards increased to nine, remained as integral parts of the Constitution of the colony until the 1st November, 1876, when they were abolished by an Act of the General Assembly, that body having been vested with the power of altering the Constitution Act. On the same day an Act of the General Assembly which subdivided the colony (exclusive of the areas included within municipalities) into counties, and established a system of local county government, came into force.

GOVERNMENT.

The Governor is appointed by the King. His salary is £5,000 a year, with an annual allowance of £1,500 on account of his estatablishment, and of £500 for travelling-expenses, provided by the colony.

Members of the Legislative Council hold their seats under writs of summons from the Governor. Till the year 1891 the appointments were for life; but in September of that year an Act was passed making appointments after that time tenable for seven years only, though Councillors may be reappointed. In either case seats may be vacated by resignation or extended absence. Two members of the Council are aboriginal native chiefs.

The members of the House of Representatives are elected for three years from the time of each general election; but at any time a dissolution of Parliament by the Governor may render a general election necessary. Four of the members are representatives of Native constituencies. For the purposes of European representation the colony is divided into sixty-eight electoral districts, four of which—the Cities of Auckland, Wellington, Christchurch, and Dunedin—return each three members, and all the other electorates one each, a total of seventy-six. The full number of members composing the House of Representatives is thus eighty. Members of the House of Representatives are chosen by the votes of the inhabitants in every electoral district appointed for that purpose. No person, who, being a bankrupt within the meaning of "The Bankruptcy Act, 1892," has not obtained an order of discharge under

that Act shall be qualified to be nominated as a candidate for election, or to be elected, or to take his seat as a member of the House of Representatives, anything in any other Act to the contrary notwithstanding.

In 1889 an amendment of the Representation Act was passed, which contained a provision prohibiting any elector from giving his vote in respect of more than one electorate at any election. "The Electoral Act, 1893," extended to women of both races the right to register as electors, and to vote at the elections for members of the House of Representatives. The qualification for registration is the same for both sexes. No person is entitled to be registered on more than one electoral roll within the colony. Women are not qualified to be elected as members of the House of Representatives. The electoral laws are the subject of special comment further on in this work. Every man registered as an elector, and not specially excepted by the Electoral Act now in force, is qualified to be elected a member of the House of Representatives for any electoral district. For European representation every adult person, if resident one year in the colony and three months in one electoral district, can be registered as an elector. Freehold property of the value of £25 held for six months preceding the day of registration until 1896 entitled a man or woman to register, if not previously registered under the residential qualification. But the Amendment Act of 1896 abolished the property qualification (except in case of existing registrations), and residence alone now entitles a man or woman to have his or her name placed upon an electoral roll. For Maori representation every adult Maori resident in any Maori electoral district (of which there are four only in the colony) can vote. Registration is not required in Native districts. [The above provisions are now incorporated in "The Electoral Act, 1902," which consolidates the electoral laws, with such amendments as were found necessary.]

The Seat of Government.

Up to the year 1865 the seat of Government of New Zealand was at Auckland. Several attempts were made by members of Parliament, by motions in the Legislative Council and House of Representatives, to have it removed to some more central place; but it was not until November, 1863, that Mr. Domett (the then ex-Premier) was successful in carrying resolutions in the House of Representatives that steps should be taken for appointing some place in Cook Strait as the permanent seat of Government in the colony. The resolutions adopted were: "(1.) That it has become necessary that the seat of Government in the colony should be transferred to some suitable locality in Cook Strait. (2.) That, in order to promote the accomplishment of this object, it is desirable that the selection of the particular site in Cook Strait should be left to the arbitrament of an impartial tribunal. (3.) That, with this view, a Bill should be introduced to give effect to the above resolu-

tions." On the 25th November an address was presented to the Governor, Sir George Grey, K.C.B., by the Commons of New Zealand, requesting that the Governors of the Colonies of New South Wales, Victoria, and Tasmania, might each be asked to appoint one Commissioner for the purpose of determining the best site in Cook Strait. Accordingly, the Hon. Joseph Docker, M.L.C., New South Wales; the Hon. Sir Francis Murphy, Speaker of the Legislative Council, Victoria; and R. C. Gunn, Esq., Tasmania, were appointed Commissioners.

These gentlemen, having made a personal inspection of all suitable places, arrived at the unanimous decision "that Wellington, in Port Nicholson, was the site upon the shores of Cook Strait which presented the greatest advantages for the administration of the government of the colony."

The seat of Government was, therefore, in accordance with the recommendation of the Commissioners, removed to Wellington in February, 1865.

Public Works.

Nearly all the public works of New Zealand are in the hands of the Government of the colony, and in the early days they simply kept pace with the spread of settlement. In 1870, however, a great impetus was given to the progress of the whole country by the inauguration of the "Public Works and Immigration Policy," which provided for carrying out works in advance of settlement. Railways, roads, and water-races were constructed, and immigration was conducted on a large scale. As a consequence, the population increased from 267,000 in 1871 to 501,000 in 1881, and to 807,929 in December, 1902, besides whom there were 43,143 Maoris, and 12,292 persons belonging to the Cook and other Pacific Islands recently annexed to the colony.

SUCCESSIVE GOVERNORS.

Succession of Governors of New Zealand, and the Dates on which they assumed and retired from the Government.

Captain William Hobson, R.N., from Jan., 1840, to 10 Sept., 1842.

[British sovereignty was proclaimed by Captain Hobson in January, 1840, and New Zealand became a dependency of the Colony of New South Wales until 3rd May, 1841, at which date it was proclaimed a separate colony. From January, 1840, to May, 1841, Captain Hobson was Lieutenant-Governor of New Zealand under Sir George Gipps, Governor of New South Wales, and from May, 1841, Governor of New Zealand; the seat of Government being at Auckland, where he died in September, 1842. From the time of Governor Hobson's death, in September, 1842, until the arrival of Governor Fitzroy, in December, 1843, the Government was carried on by the Colonial Secretary, Lieutenant Shortland.]

Lieutenant Shortland, Administrator, from 10 Sept., 1842, to 26 Dec., 1843.

Captain Robert Fitzroy, R.N., from 26 Dec., 1843, to 17 Nov., 1845.

Captain Grey (became Sir George Grey, K.C.B., in 1848), from 18 Nov., 1845, to 31 Dec., 1853.

[Captain Grey held the commission as Lieutenant-Governor of the colony until the 1st January, 1848, when he was sworn in as Governor-in-Chief over the Islands of New Zealand, and as Governor of the Province of New Ulster and Governor of the Province of New Munster. After the passing of the New Zealand Constitution Act, Sir George Grey was, on the 13th September, 1852, appointed Governor of the colony, the duties of which office he assumed on the 7th March, 1853. In August, 1847, Mr. E. J. Eyre was appointed Lieutenant-Governor of New Munster: he was sworn in, 28th January, 1848. On 3rd January, 1848, Major-General George Dean Pitt was appointed Lieutenant-Governor of New Ulster: he was sworn in, 14th February, 1848; died, 8th January, 1851; and was succeeded as Lieutenant-Governor by Lieutenant-Colonel Wynyard, appointed 14th April, 1851; sworn in, 26th April, 1851. The duties of the Lieutenant-Governor ceased on the assumption by Sir George Grey of the office of Governor, on the 7th March, 1853.]

Lieutenant-Colonel Robert Henry Wynyard, C.B., Administrator, from 3 Jan., 1854, to 6 Sept., 1855.

Colonel Thomas Gore Browne, C.B., from 6 Sept., 1855, to 2 Oct., 1861.

Sir George Grey, K.C.B., Administrator, from 3 Oct., 1861; Governor, from 4 Dec., 1861, to 5 Feb., 1868.

Sir George Ferguson Bowen, G.C.M.G., from 5 Feb., 1868, to 19 Mar., 1873.

Sir George Alfred Arney, Chief Justice, Administrator, from 21 Mar. to 14 June, 1873.

Sir James Fergusson, Baronet, P.C., from 14 June, 1873, to 3 Dec., 1874.

The Marquis of Normanby, P.C., G.C.M.G., Administrator, from 3 Dec., 1874; Governor, from 9 Jan., 1875, to 21 Feb., 1879.

James Prendergast, Esquire, Chief Justice, Administrator, from 21 Feb. to 27 Mar., 1879.

Sir Hercules George Robert Robinson, G.C.M.G., Administrator, from 27 Mar., 1879; Governor, from 17 April, 1879, to 8 Sept., 1880.

James Prendergast, Esquire, Chief Justice, Administrator, from 9 Sept. to 29 Nov., 1880.

The Honourable Sir Arthur Hamilton Gordon, G.C.M.G., from 29 Nov., 1880, to 23 June, 1882.

Sir James Prendergast, Chief Justice, Administrator, from 24 June, 1882, to 20 Jan., 1883.

Lieutenant-General Sir William Francis Drummond Jervois, G.C.M.G., C.B., from 20 Jan., 1883, to 22 Mar., 1889.

Sir James Prendergast, Chief Justice, Administrator, from 23 Mar. to 2 May, 1889.

The Earl of Onslow, G.C.M.G., from 2 May, 1889, to 24 Feb., 1892.

Sir James Prendergast, Chief Justice, Administrator, from 25 Feb., to 6 June, 1892.
The Earl of Glasgow, G.C.M.G., from 7 June, 1892, to 6 Feb., 1897.
Sir James Prendergast, Chief Justice, Administrator, from 8 Feb., 1897, to 9th Aug., 1897.
The Earl of Ranfurly, G.C.M.G., from 10th Aug., 1897.

SUPREME COURT JUDGES.

SUPREME COURT JUDGES, PAST AND PRESENT, WITH DATES OF APPOINTMENT, AND OF RESIGNATION OR DEATH.

Sir W. Martin, appointed Chief Justice, 10 Jan., 1842. Resigned, 12 June, 1857.
H. S. Chapman, appointed, 26 Dec., 1843. Resigned, 30 July, 1850. Reappointed, 23 Mar., 1864. Resigned, 31 Mar., 1875.
S. Stephen, appointed, 30 July, 1850. Appointed Acting Chief Justice, 20 Oct., 1855. Died, 13 Jan., 1858.
Daniel Wakefield, appointed, Oct., 1855. Died, Oct., 1857.
Hon. H. B. Gresson, appointed temporarily, 8 Dec., 1857. Permanently, 1 July, 1862. Resigned, 31 Mar., 1875.
Sir G. A. Arney, appointed Chief Justice, 1 Mar., 1858. Resigned 31 Mar., 1875.
A. J. Johnston, appointed, 2 Nov., 1858. Died, 1 June, 1888.
C. W. Richmond, appointed, 20 Oct., 1862. Died, 3 Aug., 1895.
J. S. Moore, appointed temporarily, 15 May, 1866. Relieved, 30 June, 1868.
C. D. R. Ward, appointed temporarily, 1 Oct., 1868. Relieved, May, 1870. Appointed temporarily, 21 Sept., 1886. Relieved, 12 Feb., 1889.
Sir J. Prendergast, appointed Chief Justice, 1 April, 1875. Resigned, 25 May, 1899.
T. B. Gillies, appointed, 3 Mar., 1875. Died, 26 July, 1889.
J. S. Williams, appointed, 3 Mar., 1875.
J. E. Denniston, appointed, 11 Feb., 1889.
E. T. Conolly, appointed, 19 Aug., 1889.
Hon. Sir P. A. Buckley, K.C.M.G., appointed, 20 Dec., 1895. Died, 18 May, 1896.
W. B. Edwards, appointed, 11 July, 1896.
F. W. Pennefather, appointed temporarily, 25 April, 1898. Resigned, 24 April, 1899.
Hon. Sir Robert Stout, K.C.M.G., appointed Chief Justice, 22 June, 1899.
J. C. Martin, acting Judge, appointed, 12 April, 1900. Resigned, 4 Dec., 1900.
Theophilus Cooper, appointed, 21 Feb., 1901.

EXECUTIVE COUNCIL, 1843–56.

MEMBERS OF THE EXECUTIVE COUNCIL OF THE COLONY OF NEW ZEALAND PREVIOUS TO THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT (NOT INCLUDING THE OFFICERS COMMANDING THE FORCES).

Willoughby Shortland, Colonial Secretary, from 3 May, 1841, to 31 Dec., 1843; succeeded by Mr. Sinclair.

Francis Fisher, Attorney-General, from 3 May to 10 Aug., 1841; succeeded by Mr. Swainson.

George Cooper, Colonial Treasurer, from 3 May, 1841, to 9 May, 1842; succeeded by Mr. Shepherd.

William Swainson, Attorney-General, from 10 Aug., 1841, to 7 May, 1856.

Alexander Shepherd, Colonial Treasurer, from 9 May, 1842, to 7 May, 1856.

Andrew Sinclair, Colonial Secretary, from 6 Jan., 1844, to 7 May, 1856.

[The three gentlemen last mentioned were nominated by Her late Majesty as *ex officio* members of the Executive Council. Two of them, the Colonial Secretary and the Colonial Treasurer, were not members of the General Assembly, opened for the first time 27th May, 1854, but all three remained in office until the establishment of Responsible Government.]

James Edward FitzGerald, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.

Henry Sewell, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.

Frederick Aloysius Weld, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.

Francis Dillon Bell, M.L.C., without portfolio, from 30 June to 11 July, 1854.

Thomas Houghton Bartley, M.L.C., without portfolio, from 14 July to 2 Aug., 1854.

Thomas Spencer Forsaith, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.

Edward Jerningham Wakefield, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.

William Thomas Locke Travers, M.H.R., without portfolio, 31 Aug. to 2 Sept., 1854.

James Macandrew, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.

PARLIAMENTS.

NUMBER OF PARLIAMENTS SINCE THE CONSTITUTION ACT PASSED FOR CONFERRING REPRESENTATIVE INSTITUTIONS UPON THE COLONY OF NEW ZEALAND, WITH THE DATES OF OPENING AND CLOSING OF SESSIONS AND DATES OF DISSOLUTION.

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
First (dissolved 15th September, 1855)	27 May, 1854 ..	9 August, 1854.
	31 August, 1854 ..	16 September, 1854.
	8 August, 1855 ..	15 September, 1855.
Second (dissolved 5th November, 1860)	15 April, 1856 ..	16 August, 1856.
	(No session in 1857)	
	10 April, 1858 ..	21 August, 1858.
	(No session in 1859)	
	30 July, 1860 ..	5 November, 1860.
Third (dissolved 27th January, 1866)	3 June, 1861 ..	7 September, 1861.
	7 July, 1862 ..	15 September, 1862.
	19 October, 1863 ..	14 December, 1863.
	24 November, 1864	13 December, 1864.
	26 July, 1865 ..	30 October, 1865.
Fourth (dissolved 30th December, 1870)	30 June, 1866 ..	8 October, 1866.
	9 July, 1867 ..	10 October, 1867.
	9 July, 1868 ..	20 October, 1868.
	1 June, 1869 ..	3 September, 1869.
	14 June, 1870 ..	13 September, 1870.
Fifth (dissolved 6th December, 1875)	14 August, 1871 ..	16 November, 1871.
	16 July, 1872 ..	25 October, 1872.
	15 July, 1873 ..	3 October, 1873.
	3 July, 1874 ..	31 August, 1874.
	20 July, 1875 ..	21 October, 1875.
Sixth (dissolved 15th August, 1879)	15 June, 1876 ..	31 October, 1876.
	19 July, 1877 ..	10 December, 1877.
	26 July, 1878 ..	2 November, 1878.
	11 July, 1879 ..	11 August, 1879.
Seventh (dissolved 8th November, 1881)	24 September, 1879	19 December, 1879.
	28 May, 1880 ..	1 September, 1880.
	9 June, 1881 ..	24 September, 1881.
Eighth (dissolved 27th June, 1884)	18 May, 1882 ..	15 September, 1882.
	14 June, 1883 ..	8 September, 1883.
	5 June, 1884 ..	24 June, 1884.

PARLIAMENTS—*continued.*

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
Ninth (dissolved 15th July, 1887) ..	7 August, 1884 ..	10 November, 1884.
	11 June, 1885 ..	22 September, 1885.
	13 May, 1886 ..	18 August, 1886.
	26 April, 1887 ..	10 July, 1887.
Tenth (dissolved 3rd October, 1890)	6 October, 1887 ..	23 December, 1887.
	10 May, 1888 ..	31 August, 1888.
	20 June, 1889 ..	19 September, 1889.
	19 June, 1890 ..	18 September, 1890.
Eleventh (dissolved 8th November, 1893)	23 January, 1891 ..	31 January, 1891.
	11 June, 1891 ..	25 September, 1891.
	23 June, 1892 ..	12 October, 1892.
	22 June, 1893 ..	7 October, 1893.
Twelfth (dissolved 14th November, 1896)	21 June, 1894 ..	24 October, 1894.
	20 June, 1895 ..	2 November, 1895.
	11 June, 1896 ..	19 October, 1896.
Thirteenth (dissolved 15th November, 1899)	7 April, 1897 ..	12 April, 1897.
	23 September, 1897	22 December, 1897.
	24 June, 1898 ..	5 November, 1898.
	23 June, 1899 ..	24 October, 1899.
Fourteenth (dissolved 12th November, 1902)	22nd June, 1900 ..	22nd October, 1900.
	1st July, 1901 ..	8th November, 1901.
	1st July, 1902 ..	4th October, 1902.

SUCCESSIVE MINISTRIES

SINCE THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT IN NEW ZEALAND IN 1856.

Name of Ministry.	Assumed Office.	Retired.
1. Bell-Sewell	7 May, 1856 ..	20 May, 1856.
2. Fox	20 May, 1856 ..	2 June, 1856.
3. Stafford	2 June, 1856 ..	12 July, 1861.
4. Fox	12 July, 1861 ..	6 August, 1862.
5. Domett	6 August, 1862 ..	30 October, 1863.
6. Whitaker-Fox	30 October, 1863 ..	24 November, 1864.
7. Weld	24 November, 1864	16 October, 1865.
8. Stafford	16 October, 1865 ..	28 June, 1869.
9. Fox	28 June, 1869 ..	10 September, 1872.
10. Stafford	10 September, 1872	11 October, 1872.
11. Waterhouse	11 October, 1872 ..	3 March, 1873.
12. Fox	3 March, 1873 ..	8 April, 1873.
13. Vogel	8 April, 1873 ..	6 July, 1875.
14. Pollen	6 July, 1875 ..	15 February, 1876.
15. Vogel	15 February, 1876	1 September, 1876.
16. Atkinson	1 September, 1876	13 September, 1876.

SUCCESSIVE MINISTRIES—*continued.*

Name of Ministry.	Assumed Office.	Retired.
17. Atkinson (reconstituted) ..	13 September, 1876	13 October, 1877.
18. Grey	15 October, 1877 ..	8 October, 1879.
19. Hall	8 October, 1879 ..	21 April, 1882.
20. Whitaker	21 April, 1882 ..	25 September, 1883.
21. Atkinson	25 September, 1883	16 August, 1884.
22. Stout-Vogel	16 August, 1884 ..	28 August, 1884.
23. Atkinson	28 August, 1884 ..	3 September, 1884.
24. Stout-Vogel	3 September, 1884	8 October, 1887.
25. Atkinson	8 October, 1887 ..	24 January, 1891.
26. Ballance	24 January, 1891 ..	1 May, 1893.*
27. Seddon	1 May, 1893.	

* Owing to the death of the Premier, the Hon. J. Ballance, on 27th April, 1893.

PREMIERS OF SUCCESSIVE MINISTRIES.

Name of Premier.	Name of Premier.
Henry Sewell.	Sir Julius Vogel, K.C.M.G.
William Fox.	Harry Albert Atkinson.
Edward William Stafford.	Harry Albert Atkinson (Ministry reconstituted).
William Fox.	Sir George Grey, K.C.B.
Alfred Domett.	Hon. John Hall.
Frederick Whitaker.	Frederick Whitaker, M.L.C.
Frederick Aloysius Weld.	Harry Albert Atkinson.
Edward William Stafford.	Robert Stout.
William Fox.	Harry Albert Atkinson.
Hon. Edward William Stafford.	Sir Robert Stout, K.C.M.G.
George Marsden Waterhouse.	Sir Harry Albert Atkinson, K.C.M.G.
Hon. William Fox.	John Ballance.
Hon. Julius Vogel, C.M.G.	Rt. Hon. Richard John Seddon, P.C.
Daniel Pollen, M.L.C.	

SPEAKERS OF THE LEGISLATIVE COUNCIL, WITH DATES OF THEIR APPOINTMENT AND DATES OF RETIREMENT OR DEATH.

Name of Speaker.	Date of Appointment.	Date of Retirement or Death.
Hon. William Swainson	16 May, 1854 ..	8 August, 1855.
Hon. Frederick Whitaker	8 August, 1855 ..	12 May, 1856.
Hon. Thomas Houghton Bartley ..	12 May, 1856 ..	1 July, 1868.
Hon. Sir John Larkins Cheese Richardson, Kt.	1 July, 1868 ..	14 June, 1879.
Hon. Sir William Fitzherbert, K.C.M.G.	14 June, 1879 ..	23 January, 1891.
Hon. Sir Harry Albert Atkinson, K.C.M.G.	23 January, 1891	28 June, 1892.
Hon. Sir Henry John Miller	8 July, 1892. 6 October, 1897.	

SPEAKERS OF THE HOUSE OF REPRESENTATIVES,

WITH DATES OF THEIR ELECTION AND DATES OF RETIREMENT.

Name of Speaker.	Date of Election.	Date of Retirement.
Sir Charles Clifford, Bart.	26 May, 1854	
	15 April, 1856 ..	3 June, 1861.
Sir David Monro, Kt. Bach. ..	3 June, 1861	
	30 June, 1866 ..	13 Sept., 1870.
Sir Francis Dillon Bell, K.C.M.G., C.B.	14 August, 1871 ..	21 October, 1875.
Sir William Fitzherbert, K.C.M.G. ..	15 June, 1876 ..	13 June, 1879.
Sir George Maurice O'Rorke, Kt. Bach.	11 July, 1879	
	24 September, 1879	
	18 May, 1882	
	7 August, 1884	
	6 October, 1887	3 October, 1890.
Hon. Major William Jukes Steward ..	23 January, 1891	8 November, 1893.
Hon. Sir George Maurice O'Rorke, Kt. Bach.	21 June, 1894	
	6 April, 1897.	
	22 June, 1900.	12 November, 1902.

FOREIGN CONSULS.

CONSULS OF FOREIGN COUNTRIES RESIDING IN, OR WITH JURISDICTION OVER, NEW ZEALAND, 3RD MAY, 1903.

Country represented.	Office held.	Name.	Place of Residence.
Austria-Hungary	Consul ..	E. Langguth	Auckland.
Belgium ..	Consul-General for Australia and Fiji	Edouard Pollet	Melbourne.
" ..	Consul ..	Hon. Charles John Johnston	Wellington.
" ..	" ..	Joseph James Kinsey ..	Christchurch.
" ..	" ..	John Burns	Auckland.
" ..	" ..	George Lyon Denniston ..	Dunedin.
Brazil ..	Vice-Consul ..	A. H. Miles	Wellington.
Chili	Consul ..	William Brown	Sydney.
Denmark ..	Consul (for North Island); Chief Consular Officer in New Zealand	Francis Henry Dillon Bell ..	Wellington.
" ..	Consul (for South Island)	Emil Christian Skog ..	Christchurch.
" ..	Vice-Consul ..	Frederick Ehrenfrid Baume	Auckland.
" ..	" ..	William Edward Perry ..	Hokitika.
" ..	" ..	Peter Jorgen Wilhelm Holsted	Dunedin.
France ..	Consul (for New Zealand)	Count Louis Antoine Marie Joseph Henri De Courte	Auckland.
" ..	Hon. Vice-Consul	Percival Clay Neill ..	Dunedin.
" ..	Consular Agent	George Humphreys ..	Christchurch.
" ..	" ..	George Dunnet	Auckland.

FOREIGN CONSULS—*continued.*

Country represented.	Office held.	Name.	Place of Residence.
German Empire	Consul-General for Commonwealth of Australia, New Zealand, and Fiji	Paul Von Buri	Sydney.
"	Consul ..	Carl Seegner	Auckland.
"	" ..	Bendix Hallenstein ..	Dunedin.
"	" ..	Philip Kippenberger ..	Christchurch.
"	" ..	Friedrich August Krull ..	Wanganui.
"	Vice-Consul ..	Eberhard Focke	Wellington.
Hawaiian Islands	Consul-General (for Australasia)	W. E. Dixon	Sydney.
"	Consul, Acting	George Dunnet	Auckland.
Italy	Consul-General for Commonwealth of Australia, New Zealand, and Fiji	C. Bertola	Melbourne.
"	Consular Agent	Thomas Wallace	Christchurch.
"	"	George Fisher	Wellington.
"	"	Edward Bowes Cargill ..	Dunedin.
"	"	Geraldo Giuseppe Perotti ..	Greymouth.
"	"	Richard A. Carr	Auckland.
Japan ..	Consul ..	A. S. Aldrich	Wellington.
Liberia ..	" ..	A. M. Meyers	Auckland.
Netherlands ..	Consul-General for Commonwealth of Australia, New Zealand, and Fiji	W. L. Bosschart	Melbourne.
" ..	Consul ..	Hon. Charles John Johnston	Wellington.
" ..	Vice-Consul ..	Edward Bowes Cargill ..	Dunedin.
" ..	" ..	Ambrose Millar	Auckland.
" ..	" ..	Harold Featherston Johnston	Wellington.
" ..	" ..	G. de Vries	Christchurch.
Portugal ..	Consul ..	John Duncan	Wellington.
" ..	Vice-Consul ..	Henry Rees George ..	Auckland.
" ..	" ..	Ian G. Duncan	Wellington.
" ..	" ..	Charles William Rattray ..	Dunedin.
Russia ..	Consul-General	Michel Oustinow	Melbourne.
" ..	Consul ..	Nicolas Passek	Melbourne.
Spain	Honorary Consul (with jurisdiction over Australia and New Zealand)	Henry Cave	Melbourne.
"	Vice-Consul ..	(Vacant)	Christchurch.
"	Honorary Vice-Consul	Alexander H. Turnbull ..	Wellington.
Sweden and Norway	Consul ..	Arthur Edward Pearce ..	Wellington.

FOREIGN CONSULS—*continued.*

Country represented.	Office held.	Name.	Place of Residence.
Sweden and Norway	Vice-Consul ..	Frank Graham	Christchurch.
United States ..	Consul (for New Zealand)	Frank Dillingham ..	Auckland.
" ..	Vice-Consul ..	Leonard A. Bachelder ..	Auckland.
" ..	Consular Agent	Robert Pitcaithley ..	Christchurch.
" ..	"	John Duncan	Wellington.
" ..	"	Frederick Orlando Bridgman	Dunedin.

AGENT-GENERAL FOR NEW ZEALAND IN LONDON.

The Hon. W. P. Reeves, Westminster Chambers, 13, Victoria Street, S.W. Secretary—Walter Kennaway, C.M.G.

THE COLONIAL OFFICE.

APRIL, 1903.

(DOWNING STREET, S.W., LONDON), WITH DATES OF APPOINTMENT.

Principal Secretary of State for the Colonies—The Right Hon. Joseph Chamberlain, M.P., 28th June, 1895.

Under-Secretaries: Parliamentary—The Right Hon. the Earl of Onslow, G.C.M.G., November, 1900. Permanent—Sir Montague Frederick Ommaney, K.C.B., K.C.M.G., 1900.

Assistant Under-Secretaries: Frederick Graham, C.B.; Charles P. Lucas, C.B.; H. B. Cox (Legal); and Reginald L. Antrobus, C.B.

CROWN AGENTS FOR THE COLONIES.

DOWNING STREET, S.W. CITY OFFICE: 1, TOKENHOUSE BUILDINGS, E.C., LONDON.

Crown Agents—Sir Ernest Edward Blake, K.C.M.G., Major Maurice Alexander Cameron, R.E., C.M.G., and William Hepworth Mercer, C.M.G.

HONOURS HELD BY COLONISTS.

PRIVY COUNCIL.

Seddon, Right Hon. Richard John, 1897.

KNIGHTS COMMANDERS OF THE MOST DISTINGUISHED ORDER OF ST. MICHAEL AND ST. GEORGE (K.C.M.G.).

Buller, Sir Walter Lawry, 1886.
Hall, Hon. Sir John, 1882.
Hector, Sir James, 1887.
Perceval, Sir Westby Brook, 1894.
Stout, Hon. Sir Robert, 1886.
Ward, Hon. Sir Joseph George, 1901.

KNIGHTS BACHELOR (KT. BACH.)

Campbell, Sir John Logan, 1902.
Miller, Hon. Sir Henry John, 1901.
O'Rorke, Hon. Sir George Maurice, 1880.
Prendergast, Hon. Sir James, 1881.
Russell, Sir William Russell, 1902.
Steward, Hon. Sir William Jukes, 1902.

COMPANIONS OF THE MOST HONOURABLE ORDER OF THE BATH (C.B.)

Cradock, Major Montagu, 1901.
Davies, Brevet-Colonel R. H., 1901.
Newall, Brevet-Colonel Stewart, 1901.
Porter, Colonel T. W., 1902.
Robin, Brevet-Colonel Alfred William, 1901.

COMPANIONS OF THE MOST DISTINGUISHED ORDER OF ST. MICHAEL AND ST. GEORGE (C.M.G.).

Bauchop, Major A., 1902.
Cadman, Hon. Alfred Jerome, 1901.
Gudgeon, Lieut.-Colonel Walter Edward, 1890.
Jowsey, Lieut.-Colonel Thomas, 1900.
Kennaway, Walter, 1897.
Richardson, Hon. Edward, 1879.
Roberts, John, 1891.
Walker, Hon. William Campbell, 1901.

COMPANIONS, DISTINGUISHED SERVICE ORDER (D.S.O.).

Abbott, Major F. W., 1902.
Bartlett, Major E., 1902.
Hickey, Lieutenant D. A., 1902.
Hughes, Captain J. G., 1900.
Major, Major C. T., 1900.
Polson, Major D., 1900.
Stevenson, Captain R., 1902.
Todd, Captain D. J. M., 1900.
Townley, Lieutenant W. V., 1902.
Tudor, Lieutenant P. L., 1902.
Walker, Captain G. H., 1901.

ROYAL RED CROSS.

Williamson, Miss J. M. N., 1900

VICTORIA CROSS.

Hardham, Farrier-Major W. J., 1901.

NEW ZEALAND CROSS.

Adamson, Thomas, 1869.
Black, Solomon, 1869.
Biddle, Benjamin, 1869.
Hill, George, 1869.
Lingard, William, 1869.
Mace, Francis Joseph, 1869.
Maling, Christopher, 1869.
Mair, Gilbert, 1870.
Preece, George, 1869.
Roberts, John Mackintosh, 1869.
Rodriguez, Antonio, 1869.
Shepherd, Richard, 1869.

DISTINGUISHED CONDUCT MEDALS AWARDED TO MEMBERS OF NEW ZEALAND CONTINGENTS IN SOUTH AFRICA (1899–1902).

Baigent, Private Ivanhoe.
Black, Sergeant-Major G. C.
Burr, Sergeant-Major W. T.
Cassidy, Sergeant W.
Fletcher, Sergeant-Major W. H.
Free, Private A.
Kent, Sergeant W.
Langham, Sergeant-Major J.
Lockett, Sergeant-Major E. B.
Pickett, Sergeant-Major M.
Rouse, Farrier-Sergeant G.
Travers, Quartermaster-Sergeant.
Wade, Private, H. B.
White, Sergeant-Major H.

PERSONS ALLOWED TO RETAIN THE TITLE OF "HONOURABLE" WITHIN HER MAJESTY'S DOMINIONS.

By despatch from the Secretary of State for the Colonies, dated Downing Street, 15th June, 1893, His Excellency the Governor was apprised that the title of "Honourable," appertaining to Members of the Executive and Legislative Councils in colonies possessing Responsible Government, whether confined to duration of office or continued for life, was approved by Her late Majesty for use and recognition throughout her dominions, either during office or for life, as the case may be.

By further despatch of 10th March, 1894, the Secretary of State announced that he was prepared in future to submit for the approval of the Sovereign the recommendation of the Governor of any colony having Responsible Government that the President of the Legislative Council or the Speaker of the Legislative Assembly may, on quitting office after three years' service in their respective offices, be permitted to retain the title of "Honourable." This title is now held by Sir G. M. O'Rorke and Major Sir William Jukes Steward.

Besides the Members of the Executive and Legislative Councils, the following ex-Ministers are allowed, as such, to retain the title of "Honourable": Bryce, John, 1884; Cadman, A. J., 1901; Fergus, Thomas, 1891; Hislop, Thomas W., 1891; Johnston, Walter W., 1884; Mitchelson, Edwin, 1891; Oliver, Richard, 1884; Reeves, William P., 1896; Richardson, George F., 1891; Thompson, Thomas, 1900; Tole, Joseph A., 1888.

GOVERNOR OF NEW ZEALAND.

RANFURLY, His Excellency The Right Honourable Sir Uchter John Mark, fifth Earl of (Ireland, 1831), Viscount Northland, (1791), Baron

Welles (1781), Lord-in-Waiting to Her late Majesty (1895–97), Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George; Knight of Justice and Member of the Council of the Order of St. John of Jerusalem; son of third earl, brother of fourth earl; born 14th August, 1856; succeeded, 1875; married, 1880, the Honourable Constance Elizabeth, only child of seventh Viscount Charlemont, C.B. Living issue: One son (Viscount Northland), two daughters (Ladies Constance and Eileen Knox). Appointed 6th April, 1897, and assumed office 10th August, 1897, as Governor and Commander-in-Chief in and over His Majesty's Colony of New Zealand and its Dependencies. Salary, £5,000. Allowance on account of establishment £1,500, and travelling-expenses £500 per annum. The allowance is not payable for any period during which the Governor is absent from the colony. Residences: Northland House, Dungannon, Ireland; Government House, Wellington; Government House, Auckland.

Private Secretary: Dudley Alexander (Major "The Prince of Wales's Own," West Yorkshire Regiment).

Assistant Private Secretary: The Honourable Charles Edward Hill-Trevor.

Aide-de-Camp: Viscount Northland (Coldstream Guards).

ADMINISTRATOR OF THE GOVERNMENT. — The Chief Justice, appointed under a dormant Commission.

EXECUTIVE COUNCIL.

1ST MAY, 1903.

THE annual appropriation for Ministers' salaries is fixed by statute at the sum of £8,900, of which £1,600 is for the Prime Minister, £1,300 for the Minister for Railways, and £1,000 for each of six other Ministers. All Ministers to whom salaries are appropriated are members of the Executive Council, holding one or more of the offices specified by law. Members of the Executive Council travelling within the colony on public service are entitled to allowance not exceeding £1 10s. per day when so engaged, but not during the time a Minister is attending a session of the General Assembly. The members of the Executive Council to whom salaries are payable, and who are not otherwise provided with residences at the seat of Government, are entitled to an allowance in lieu thereof at the rate of £200 a year.

The Executive Council now consists of:—

His Excellency the GOVERNOR presiding.

Rt. Hon. Richard John Seddon, P.C., Prime Minister, Colonial Treasurer, Minister of Defence, and Minister of Labour.

Hon. Sir Joseph George Ward, K.C.M.G., Minister for Railways, Colonial Secretary, Postmaster-General and Commissioner of Electric Telegraphs, Minister of Industries and Commerce, and Minister of Public Health.

Hon. James Carroll, Native Minister and Commissioner of Stamp Duties.
Hon. William Campbell Walker, C.M.G., Minister of Education and Minister of Immigration.
Hon. William Hall-Jones, Minister for Public Works and Minister of Marine.
Hon. James McGowan, Minister of Justice and Minister of Mines. (23rd January, 1900.)
Hon. Thomas Young Duncan, Minister of Lands and Minister for Agriculture. (2nd July, 1900.)
Hon. Charles Houghton Mills, Commissioner of Trade and Customs. (29th October, 1900.)
(Vacant) Attorney-General.

Clerk of the Executive Council—Alexander James Willis.

THE GENERAL ASSEMBLY.

Legislative Council.

The number of members at present constituting the Legislative Council is forty-one. The number cannot be less than ten, but is otherwise unlimited. Prior to 1891 Councillors summoned by the Governor held their appointments for life; but on the 17th of September of that year an Act was passed giving the Council power to elect its own Speaker for a period of five years, and making future appointments to the Council tenable for seven years only, to be reckoned from the date of the writ of summons of the Councillor's appointment, though every such Councillor may be reappointed. The qualifications are that the person to be appointed be of the full age of twenty-one years, and a subject of His Majesty, either natural-born or naturalised by or under any Act of the Imperial Parliament or by or under any Act of the General Assembly of New Zealand. All contractors to the public service to an amount of over £50 and Civil servants of the colony are ineligible as Councillors. Payment of Councillors is at the rate of £200 a year, payable monthly. Actual travelling-expenses to and from Wellington are also allowed. A deduction of £1 5s. per sitting day is made in case of an absence, except through illness or other unavoidable cause. Under "The Legislative Council Act, 1891," a seat is vacated by any member of the Council: (1.) If he takes any oath or makes any declaration or acknowledgment of allegiance, obedience, or adherence to any foreign Prince or Power; or (2), if he does, or concurs in, or adopts any act whereby he may become a subject or citizen of any foreign State or Power, or is entitled to the rights, privileges, or immunities of a subject of any foreign State or Power; or (3), if he is a bankrupt, or compounds with his creditors under any Act for the time being in force; or (4), if he is a public defaulter, or is attainted of treason, or is convicted of felony or any infamous crime; or (5), if he resigns his seat by writing under his hand addressed to and accepted by the Governor; or (6), if for more than one whole session

of the General Assembly he fails, without permission of the Governor notified to the Council, to give his attendance in the Council. By the Standing Orders of the Council, the presence of one-fourth of the members of the Council, exclusive of those who have leave of absence, is necessary to constitute a meeting for the exercise of its powers. This rule, however, may be altered from time to time by the Council.

The ordinary sitting-days are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 p.m. to 5 p.m., resuming again at 7.30 p.m. when necessary.

Roll of Members of the Honourable the Legislative Council of New Zealand, (1st May, 1903.)

Speaker—The Hon. Sir Henry John Miller, Kt.

Chairman of Committees—The Hon. William Cowper Smith.

Name.	Provincial District.	Date of Appointment.
Arkwright, the Hon. Francis	Wellington.	13 December, 1902.
Baillie, the Hon. William Douglas Hall ..	Marlborough.	8 March, 1861.*
Baldey, the Hon. Alfred	Otago.	18 March, 1903.
Bolt, the Hon. William Mouat	Otago.	16 October, 1899.
Bowen, the Hon. Charles Christopher ..	Canterbury.	23 January, 1891.*
Cadman, the Hon. Alfred Jerome, C.M.G.	Auckland.	21 December, 1899.
Carncross, the Hon. Walter Charles Frederick	Taranaki.	18 March, 1903.
Feldwick, the Hon. Henry	Otago.	16 October, 1899.
Fraser, the Hon. Francis Humphris ..	Wellington.	22 June, 1899.
Gourley, the Hon. Hugh	Dunedin.	22 June, 1899.
Harris, the Hon. Benjamin	Auckland.	3 February, 1897.
Holmes, the Hon. James	Westland.	18 April, 1902.
Jenkinson, the Hon. John Edward ..	Canterbury.	6 June, 1900.
Johnston, the Hon. Charles John ..	Wellington.	23 January, 1891.*
Jones, the Hon. George	Otago.	13 December, 1902.
Kelly, the Hon. Thomas	Taranaki.	16 October, 1899.
Kelly, the Hon. William	Auckland.	3 February, 1897.
Kenny, the Hon. Courtney William Aylmer Thomas	Marlborough.	15 May, 1885.*
Louisson, the Hon. Charles	Canterbury.	22 December, 1900.
McLean, the Hon. George	Otago.	19 December, 1881.*
Marshall, the Hon. James	Westland.	18 April, 1902.
Miller, the Hon. Sir Henry John, Kt. (Speaker)	Otago.	8 July, 1865.*
Montgomery, the Hon. William.. ..	Canterbury.	16 October, 1899.
Ormond, the Hon. John Davies ..	Hawke's Bay.	20 January, 1891.*
Peacock, the Hon. John Thomas ..	Canterbury.	9 October, 1877.*
Pinkerton, the Hon. David	Otago.	3 February, 1897.
Pitt, the Hon. Albert, Lieut.-Colonel ..	Nelson.	23 December, 1899.
Reeves, the Hon. Richard Harman Jeffares	Nelson.	13 December, 1902.
Rigg, the Hon. John	Wellington.	6 June, 1900.
Scotland, the Hon. Henry	Taranaki.	24 February, 1868.*
Smith, the Hon. Alfred Lee	Otago.	18 June, 1898.
Smith, the Hon. William Cowper ..	Hawke's Bay.	13 December. 1902.
Stevens, the Hon. Edward Cephas John..	Canterbury.	7 March, 1882.*

* Life members.

ROLL OF MEMBERS OF THE LEGISLATIVE COUNCIL—*continued.*

Name.	Provincial District.	Date of Appointment.
Taiaroa, the Hon. Hori Kerei	Otago.	15 May, 1885.*
Thompson, the Hon. Thomas	Auckland.	18 March, 1903.
Tomoana, the Hon. Henare	Hawke's Bay.	24 June, 1898.
Trask, the Hon. Francis	Nelson.	18 March, 1903.
Twomey, the Hon. Jeremiah Matthew ..	Canterbury.	18 June, 1898.
Walker, the Hon. Lancelot	Canterbury.	15 May, 1885.*
Walker, the Hon. William Campbell, C.M.G.	Canterbury ..	14 October, 1899.
Williams, the Hon. Henry	Auckland ..	7 March, 1882.*

* Life Members.

Clerk of Parliaments, Clerk of the Legislative Council, and Examiner of Standing Orders upon Private Bills—Leonard Stowe.
Clerk-Assistant—Arthur Thomas Bothamley.
Second Clerk-Assistant—George Moore.
Interpreter—Henry S. Hadfield.

HOUSE OF REPRESENTATIVES.

The number of members constituting the House of Representatives is eighty—seventy-six Europeans and four Maoris. This number was fixed by the Act of 1900, which came for the first time into practical operation at the general election of 1902. Previously (from 1890) the House consisted of seventy-four members, seventy Europeans and four Maoris; and previously to that (from 1881) of ninety-five members, ninety-one Europeans and four Maoris. The North Island at present returns thirty-eight European members, and the Middle Island thirty-eight. The Cities of Auckland, Wellington, Christchurch, and Dunedin return each three members, and all other electoral districts one each. The elections are triennial, except in the case of a dissolution by the Governor. Every registered elector, being of the male sex, and free from any of the disqualifications mentioned in 'The Electoral Act, 1902," is eligible for membership. All contractors to the public service of New Zealand to whom any public money above the sum of £50 is payable, directly or indirectly, in any one financial year, as well as the Civil servants of the colony, are incapable being elected as, or of sitting or voting as, members. The payment made to members of the House of Representatives is £25 per month, amounting to £300 per annum, subject to certain deductions for absence during session not due to sickness or other unavoidable cause. Travelling-expenses to and from Wellington are also allowed. This scale of payment came into force on the 7th November, 1901, under the provisions of "The Payment of Members Act, 1901." Twenty members, inclusive of the Speaker, constitute a quorum. Unless otherwise ordered, the sitting-days of the House are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 p.m. to 5.30 p.m., resuming at 7.30 p.m. Order of admission to the Speaker's Gallery is by ticket obtained from the Speaker. The Strangers' Gallery is open free to the public.

Roll of Members of the House of Representatives.

(1st May, 1903.)

Speaker—

Chairman of Committees—

Name.	Electoral District.	Date of Notification of Return of Writ.
For European Electorates.		
Aitken, John Guthrie Wood ..	City of Wellington..	10 December, 1902.
Alison, Ewen William	Waitemata ..	"
Allen, Edmund Giblett	Chalmers.. ..	"
Allen, James	Bruce	"
Arnold, James Frederick ..	City of Dunedin ..	"
Barber, William Henry Peter ..	Newtown ..	"
Baume, Frederick Ehrenfried ..	City of Auckland ..	"
Bedford, Harry Dodgshun ..	City of Dunedin ..	"
Bennet, James	Tuapeka	"
Bollard, John	Eden	"
Buchanan, Walter Clark ..	Wairarapa ..	"
Buddo, David	Kaiapoi	"
Carroll, Hon. James	Waiapu	"
Colvin, James	Buller	"
Davey, Thomas Henry	City of Christchurch	"
Duncan, Hon. Thomas Young ..	Oamaru	"
Duthie, John	City of Wellington..	"
Ell, Henry George	City of Christchurch	"
Field, William Hughes	Otaki	"
Fisher, George	City of Wellington..	"
Flatman, Frederick Robert ..	Geraldine ..	"
Fowlds, George	Grey Lynn ..	"
Fraser, Alfred Levavasour Durell..	Napier	"
Fraser, William	Wakatipu ..	"
Graham, John	City of Nelson ..	"
Guinness, Arthur Robert.. ..	Grey	"
Hall, Charles	Waipawa.. ..	"
Hall-Jones, Hon. William ..	Timaru	"
Hanan, Josiah Alfred	Invercargill ..	"
Harding, Alfred Ernest	Kaipara	"
Hardy, Charles Albert Creery ..	Selwyn	"
Herdman, Alexander Laurence ..	Mount Ida ..	"
Herries, William Herbert ..	Bay of Plenty ..	"
Hogg, Alexander Wilson ..	Masterton ..	"
Houston, Robert Morrow ..	Bay of Islands ..	"
Jennings, William Thomas ..	Egmont	"
Kidd, Alfred	City of Auckland ..	"
Kirkbride, Matthew Middlewood ..	Manukau ..	"
Lang, Frederic William	Waikato	"
Laurenson, George	Lyttelton.. ..	"
Lawry, Frank	Parnell	"
Lethbridge, Frank Yates ..	Oroua	"
Lewis, Charles	Courtenay ..	"
McGowan, Hon. James	Thames	"
McKenzie, Roderick	Motueka	"
Mackenzie, Thomas	Waikouaiti ..	"
McLachlan, John	Ashburton ..	"
McNab, Robert	Mataura	"
Major, Charles Edwin	Hawera	"
Mander, Francis	Marsden	"

Roll of Members of the House of Representatives—*continued.*

Name.	Electoral District.	Date of Notification of Return of Writ.
For European Electorates—contd.		
Massey, William Ferguson ..	Franklin	10 December, 1902.
Millar, John Andrew	City of Dunedin ..	"
Mills, Hon. Charles Houghton ..	Wairau	"
Moss, Edward George Britton ..	Ohinemuri ..	"
O'Meara, John	Pahiatua	"
Reid, Donald (jun.)	Taieri	"
Remington, Arthur Edward ..	Rangitikei ..	"
Rhodes, Robert Heaton	Ellesmere ..	"
Russell, Sir William Russell, Kt. Bach.	Hawke's Bay ..	"
Rutherford, Andrew William ..	Hurunui	"
Seddon, Rt. Hon. Richard John, P.C.	Westland ..	"
Sidey, Thomas Kay	Caversham ..	"
Smith, Edward Metcalf	Taranaki	"
Steward, Hon. Sir William Jukes, Kt. Bach.	Waitaki	"
Symes, Walter	Patea	"
Tanner, William Wilcox	Avon	"
Taylor, Thomas Edward	City of Christchurch	"
Thomson, James William ..	Clutha	"
Thomson, John Charles	Wallace	"
Vile, Job	Manawatu ..	"
Ward, Hon. Sir Joseph George, K.C.M.G.	Awarua	"
Wilford, Thomas Mason	Hutt	"
Willis, Archibald Dudingston ..	Wanganui ..	"
Witheford, Joseph Howard ..	City of Auckland ..	"
Witty, George	Riccarton ..	"
Wood, William Thomas	Palmerston ..	"
For Maori Electorates.		*Day of Election.*
Heke, Hone	Northern Maori ..	22 December, 1902.
Kaihau, Henare	Western Maori ..	"
Parata, Tame	Southern Maori ..	"
Pere, Wiremu	Eastern Maori ..	"

Clerk of House of Representatives—H. Otterson.
Clerk-Assistant—A. J. Rutherfurd.
Second Clerk-Assistant—A. F. Lowe.
Sergeant-at-Arms—Major T. V. Shepherd.
Reader and Clerk of Bills and Papers—E. W. Kane.
Chief *Hansard* Reporter—Silas Spragg.
Interpreters—L. M. Grace, D. F. G. Barclay.
Clerk of Writs—H. Pollen.
Deputy Clerk of Writs— R. F. Lynch.
Chief Librarian—Charles Wilson.

OFFICIAL LIST.

(1st April, 1903.)

PRIME MINISTER'S OFFICE.

Prime Minister—Rt. Hon. R. J. Seddon, P.C.
Secretary to Cabinet—A. J. Willis

COLONIAL SECRETARY'S DEPARTMENT.

Chief Office.

Colonial Secretary—Hon. Sir J. G. Ward, K.C.M.G.
Under-Secretary—Hugh Pollen
Chief Clerk—R. F. Lynch
Clerks—J. F. Andrews, A. R. Kennedy, F. A. de la Mare ...
Officer in Charge of Government Buildings—W. H. Hennah

Audit Office.

Controller and Auditor-General—J. K. Warburton
Assistant Controller and Auditor—J. C. Gavin
Chief Clerk—L. C. Roskruge
Clerks—H. S. Pollen, W. G. Holdsworth, E. J. A. Stevenson, J. T. Dumbell, C. M. Georgeson, J. Skerrett, R. A. Gray
Cadets—C. E. Easton, G. V. Bogle
Cadette—E. A. Casey
Extra Clerks—D. C. Innes, J. Swift, A. E. Bybles, J. Ward, C. E. Briggs, E. E. Smythe, J. McC. Hamilton, T. S. Hamer, S. W. Thornton, G. G. Smith
Audit Officer, Agent-General's Office, London—C. F. W. Palliser
Audit Inspectors—P. P. Webb, A. H. Maclean, J. King, A. W. Eames, G. H. I. Easton, C. P. Johnson, H. A. Lamb, B. A. Meek, A. A. Bethune, J. H. Fowler

Registrar-General's Office.

Registrar-General—E. J. Von Dadelszen
Chief Clerk and Deputy Registrar-General—G. Drury
Clerks—F. H. Machattie, W. W. Cook, Ben Keys
Index Clerk—S. Coffey

Registrars of Births, Deaths, and Marriages.

Four Chief Towns.

Auckland—E. H. Lyons
Wellington—F. W. Mansfield
Christchurch—L. C. Williams
Dunedin—H. Maxwell

Printing and Stationery Department.

Government Printer, Stationery Office Manager, and Controller of Stamp Printing—John Mackay
Superintending Overseer—J. J. Gamble
Chief Clerk and Accountant—B. B. Allen
Clerk and Computer—N. B. K. Manley
Clerks—F. Barraud, J. W. Hall, R. Watts, A. Stace, A. Williams
Cadette—A. Paterson
Cadet—P. C. Jordan
Hansard Supervisor—M. F. Marks
Overseers—B. Wilson, J. F. Rogers
Overseer, Jobbing-room—G. Tattle
Night Foreman—D. Archibald
Readers—W. Fuller, H. S. Mountier, H. Lee, W. Sutherland
Overseer, Machine-room—J. Phillips
Sub-overseer, Machine-room — John Burns
Overseer, Binding Branch—W. Franklin
Sub-overseer, Binding Branch—G. H. Broad
Forewoman, Binding Branch — Miss O'Malley
Stamp Printer—H. Hume
Overseer, Lithographic Branch—D. Ross
Chief Draughtsman—G. N. Sturtevant
Stereotyper and Electrotyper—W. J. Kirk
Engineer—T. R. Barrer

COLONIAL TREASURER'S DEPARTMENT.

Chief Office.

Colonial Treasurer—Rt. Hon. R. J. Seddon, P.C.
Secretary to the Treasury, Receiver-General, Paymaster-General, and Registrar of New Zealand Consols—James B. Heywood

Accountant to the Treasury—Robert J. Collins
Cashier—C. E. Chittey
Corresponding Clerk—H. Blundell
Clerks—R. B. Vincent, W. E. Cooper, E. L. Mowbray, A. O. Gibbes, J. Holmes, H. N. W. Church, A. J. Morgan, T. J. Davis, F. H. Tuckey, H. Hawthorn, W. Wilson, G. C. Rodda, G. A. Fraser, E. Fisher
Cadets — W. Gillanders, J. Christie, W. L. Clapson, A. Hore, P. Dunstan
Cadettes — L. McIntosh, M. Ralston, D. M. Schramm, H. M. Batham, E. M. Taylor, E. A. C. Burrage, R. B. Banks
Officer for Payment of Imperial Pensions at Auckland—B. J. Daveney

FRIENDLY SOCIETIES AND TRADE UNIONS REGISTRY OFFICE.

Registrar and Actuary—George Leslie
Revising Barrister—L. G. Reid
Clerk—C. T. Benzoni

OLD-AGE PENSIONS OFFICE.

Registrar—J. Eman Smith
Chief Clerk—G C. Fache
Clerks—F. M. Leckie, J. S. Lambert, R. S. Stokes, F. Twiss
Cadets—P. Cunningham, G. N. Morris
Deputy Registrars—
Auckland—S. Ruddock
Wellington—F. W. Mansfield, Registrar of Births, &c.
Christchurch—L. C. Williams, Registrar of Electors
Dunedin—Robert Hill
Invercargill—J. G. Petrie, Registrar of Electors
(In all other Pension Districts Clerks of the Magistrates' Courts are the Deputy Registrars)

LAND AND INCOME TAX DEPARTMENT.

Commissioner—John McGowan
Deputy Commissioner—G. F. C. Campbell
Chief Clerk—F. J. M. D. Walmsley
Accountant—P. Heyes

LAND TAX.

Clerk in Charge—A. J. McGowan
Clerks—H. Nancarrow, D. R. Purdie, J. Stevenson, R. Hepworth, E. Randell, J. N. Grant, M. Fraser, J. Ferguson, H. S. Barron, C. E. J. Dowland, C. J. Lovatt

INCOME TAX.

Clerk in Charge—J. M. King
Clerks—W. M. Tyers, J. W. Black, D. G. Clark, G. W. Jänisch, H. A. Anderson
Receiver of Land and Income Tax—C. V. Kreeft
Cadet—J. M. Park
Cadettes—G. Cooke, K. L. Morgan

DEPARTMENT OF JUSTICE.

HEAD OFFICE.

Minister of Justice — Hon. James McGowan
Under-Secretary—F. Waldegrave
Chief Clerk—C. B. Jordan
Translator—G. H. Davies
Clerks—C. E. Matthews, G. F. Dixon A. J. Thompson

CROWN LAW OFFICE.

Attorney-General—(vacant)
Solicitor-General — F. Fitchett, M.A., LL.D.
Assistant Law Officer—L. G. Reid
Law Draftsman—
Clerk—E. Y. Redward
Cadet—O. N. Gillespie

PATENT OFFICE.

Registrar of Patents, Designs, and Trade-marks—F. Waldegrave
Deputy Registrar—J. C. Lewis
Clerk—Mary Eyre
Cadet—J. T. Bishop

JUDICIAL.

Supreme Court Judges.

Chief Justice—
Wellington—Sir R. Stout, K.C.M.G.
Judges—
Wellington—W. B. Edwards, Theo. Cooper
Auckland—E. T. Conolly
Christchurch—J. E. Denniston
Dunedin—J. S. Williams

District Court Judges.

Wairarapa, Wanganui, New Plymouth, Hawera, and Palmerston North—C. C. Kettle
Nelson—H. W. Robinson
Ashburton, Timaru, Oamaru, Queenstown, Naseby, Lawrence, Invercargill, Hokitika, Greymouth, Westport, Reefton, and Kumara—C. D. R. Ward

Registrars of the Supreme Court.

Auckland—H. C. Brewer
New Plymouth—R. L. Stanford

Wanganui—C. C. Kettle
Napier—A. Turnbull
Gisborne—W. A. Barton
Wellington—D. G. A. Cooper
Nelson—H. W. Robinson
Blenheim—A. McArthur
Christchurch—A. R. Bloxam
Hokitika—V. G. Day
Dunedin—G. A. King
Invercargill—J. R. Colyer

Sheriffs.

Auckland—H. C. Brewer
Taranaki—A. H. Holmes
Hawke's Bay—A. Turnbull
Poverty Bay—W. A. Barton
Wellington—D. G. A. Cooper
Wairarapa—E. Rawson
Wanganui and Rangitikei—C. A. Barton
Nelson—W. Heaps
Westland North—E. C. Kelling
Central Westland—A. Askenbeck
Marlborough—J. Terry
Canterbury—A. R. Bloxam
Timaru—C. A. Wray
Westland—V. G. Day
Otago—G. A. King
Southland—J. R. Colyer

Crown Solicitors.

Auckland—Hon. J. A. Tole
New Plymouth—A. Standish
Gisborne—J. W. Nolan
Napier—H. A. Cornford
Wellington—F. H. D. Bell
Wanganui—S. T. Fitzherbert
Nelson—C. Y. Fell
Blenheim—R. McCallum
Christchurch—T. W. Stringer
Timaru—J. W. White
Dunedin—J. F. M. Fraser
Invercargill—T. M. Macdonald
Oamaru—A. G. Creagh

Crown Prosecutors (District Courts).

New Plymouth—A. Standish
Hawera—E. L. Barton
Wanganui and Palmerston North—S. T. Fitzherbert
Masterton—A. R. Bunny
Nelson—C. Y. Fell
Westport and Reefton—C. E. Harden
Hokitika—J. Park
Greymouth—M. Hannan
Timaru—J. W. White
Oamaru—A. G. Creagh
Queenstown—Wesley Turton
Invercargill—T. M. Macdonald

Stipendiary Magistrates.

Auckland—H. W. Brabant
Pokeno, Waikato, &c.—H. W. Northcroft
Onehunga, &c.—T. Hutchison*
Russell, &c.—E. C. Blomfield
Tauranga, &c.—J. M. Roberts*
Thames, &c.—R. S. Bush*
Gisborne, &c.—W. A. Barton
New Plymouth—R. L. Stanford
Hawera, &c.—H. Eyre-Kenny
Wanganui, &c.—C. C. Kettle
Palmerston North, &c.—A. Greenfield
Wellington, &c.—W. R. Haselden
Wairarapa, &c.—W. P. James
Napier &c.—A. Turnbull
Nelson—H. W. Robinson*
Motueka, Collingwood, &c. — Wilson Heaps*
Blenheim, &c.—A. McArthur*
Christchurch, &c.—R. Beetham
Kaiapoi, &c.—H. W. Bishop
Timaru, &c.—C. A. Wray
Greymouth, Westport, &c. — R. S. Hawkins*
Hokitika, &c.—D. Macfarlane*
Dunedin, &c.—E. H. Carew* and C. C. Graham
Oamaru, &c.—J. Keddell*
Milton, &c.—G. Cruickshank*
Clyde, &c.—F. J. Burgess*
Naseby—J. McEnnis*
Invercargill, &c.—S. E. McCarthy*
Chatham Islands—R. S. Florance

Official Assignees in Bankruptcy.

Auckland—J. Lawson, J.P.
Wellington—J. Ashcroft, J.P.
Christchurch—G. L. Greenwood
Dunedin—C. C. Graham, S.M.

Clerks of District and Magistrates' Courts.

New Plymouth—A. H. Holmes
Hawera—A. Trimble
Wanganui—C. A. Barton
Palmerston North—W. Matravers
Masterton—E. Rawson
Nelson—C. H. Webb-Bowen
Hokitika—W. A. D. Banks
Kumara—T. M. Lawlor
Greymouth—B. Harper
Westport—E. C. Kelling
Reefton—A. Askenbeck
Timaru—T. Howley
Ashburton—T. W. Tayler
Oamaru—R. P. Ward

* Are also Wardens of Goldfields.

Invercargill—J. R. Colyer
Queenstown—A. A. Mair
Lawrence—A. M. Eyes
Naseby—F. Hart

Receivers of Gold Revenue, Mining Registrars, and Clerks of Wardens' and Magistrates' Courts.

Thames—J. Jordan
Coromandel—D. Banks
Paeroa—H. R. Bush
Waihi—E. W. Cave
Tauranga—W. A. Thom
Whangarei—T. Kirk
Havelock (Marlborough)—H. McArdle
Nelson—C. H. Webb-Bowen
Blenheim—John Terry
Motueka—H. E. Gilbert
Collingwood—W. Seale
Westport—E. C. Kelling
Charleston—R. V. McGlone
Reefton—A. Askenbeck
Ahaura—J. C. Malfroy
Greymouth—B. Harper
Kumara—T. M. Lawlor
Hokitika—W. A. D. Banks
Ashburton—T. W. Tayler
Naseby, &c.—F. Hart
Wyndham—D. Bogue
Clyde, Black's, and Alexandra—F. T. D. Jeffrey
Cromwell—E. D. Mosley
Queenstown and Arrowtown—A. A. Mair
Lawrence—A. M. Eyes
Gore—M. Foley
Riverton—A. G. Ashby

Clerks of Magistrates' Courts.

Auckland—H. G. Ralfe
Gisborne—G. J. Johnstone
Hamilton—W. Shanaghan
Napier—R. B. Mathias
Hastings—P. Skerrett
Wairoa—H. H. Carr
Stratford—J. B. Stoney
Dannevirke—S. Tansley
Marton, &c.—F. M. Deighton
Feilding—J. M. Rodgers
Wellington—A. D. Thomson
Christchurch—W. Martin
Lyttelton—J. Fitzgerald
Kaiapoi—M. Lynskey
Waimate—W. Y. Purchas
Dunedin—W. G. P. O'Callaghan
Port Chalmers—T. Hinchliff

Native Land Court.

Chief Judge—G. B. Davy
Judges—A. Mackay, D. Scannell, H. W. Brabant, W. J. Butler, H. F. Edger, W. G. Mair, H. D. Johnson, J. M. Batham
Registrars—Auckland, J. W. Browne; Gisborne, J. Brooking; Wellington, R. C. Sim

Commissioners of the Native Land Court.

R. S. Bush, A. Turnbull, E. C. Blomfield, C. C. Kettle, J. M. Roberts, W. Stuart, H. W. Bishop, E. H. Carew, H. Eyre-Kenny, R. L. Stanford, T. Hutchison, H. W. Robinson, R. S. Florance: Sub-Commissioners—J. Brooking, W. A. Thom
Government Native Agent, Otorohanga—G. T. Wilkinson

Validation Court.

Chief Judge—G. B. Davy
Judges—The Judges of the Native Land Court
Registrars—The Registrars of the Native Land Court

Coroners.

Auckland, T. Gresham, E. Baker; Coromandel, A. R. H. Swindley; Collingwood, E. Davidson; Foxton, E. S. Thynne; Hamilton, J. S. Bond; Hawera, C. E. Major; Marton, A. Ross; Otahuhu, S. Luke; Otaki W. H. Simcox; Paeroa, W. Forrest; Pahi, J. B. Ariell; Palmerston North, J. Mowlem; Port Albert, L. P. Becroft; Queenstown, L. Hotop; Raglan, W. H. Wallis; Midhirst, J. Mackay; Takaka, A. Sinclair; Thames, A. Bruce; Tauranga, A. C. H. Tovey; Te Awamutu, J. B. Teasdale; Te Kopuru, T. Webb; Waipawa, S. Johnson; Wellington, J. Ashcroft; Whangarei, J. M. Killen; Woodville, E. J. Gothard. All Stipendiary Magistrates are *ex officio* Coroners.

New Zealand Police Force.

Head Office.

Commissioner—John Bennett Tunbridge
Chief Clerk—John Evans
Clerks—John Tasker, William John Mahoney, Walter Gollan

Police Department.

Inspectors—John Cullen, John Wybrant Ellison, Robert James Gillies, Terence O'Brien, Ewen Macdonell, Nicholas Kiely, Edward Wilson, Alfred James Mitchell
Sub-Inspectors—Patrick Black, Henry Green, John Dwyer, John O'Donovan

PRISONS DEPARTMENT.

Inspector—Lieut.-Colonel Arthur Hume, N.Z.M.
Clerk—T. E. Richardson
Gaolers — Auckland, Francis Egerton Severne; Dunedin, John Henry Bratby; Hokitika, Thomas Rosson Pointon, Invercargill, Alexander Armstrong; Lyttelton, Matthew Michael Cleary; Napier, Michael Flannery; New Plymouth, Bartholomew Lloyd O'Brien; Wanganui, Robert T. N. Beasley; Wellington, Patrick Samuel Garvey; Wai-o-tapu, Jeremiah Charles Scanlon

DEPARTMENT OF INDUSTRIES AND COMMERCE.

Minister—Hon. Sir J. G. Ward, K.C.M.G.
Secretary—T. E. Donne
Acting Chief Clerk—G. S. Munro.

DEPARTMENT OF TOURIST AND HEALTH RESORTS.

Minister—Hon. Sir J G. Ward, K.C.M.G.
Superintendent—T. E. Donne
Chief Clerk—C. R. C. Robieson
Inspector—F. Moorhouse
Accountant—R. E. Hayes
Journalist—J. Cowan
Clerks—H. Kirk, R. G. M. Park, J. W. Hill, S. J. Collett,, W. M. Stevens, G. F. McGirr
Shorthand-writers and Typists—S. Dimant, N. Lambert
District Agents—Auckland, E. H. Montgomery; Rotorua, J. Andrews; Christchurch, W. R. Blow; Dunedin, (vacant); Invercargill, W. A. Saunders
Government Balneologist, Rotorua—A. S. Wohlmann, M.D., M.R.C.S., L.R.C.P.
House Surgeon, Rotorua—W. B. Craig, M.B.
Resident Medical Officer, Te Aroha—G. G. Kenny, M.B.
Manager, Hanmer Hot Springs—J. B. Gould

DEPARTMENT OF LABOUR.

Minister of Labour—Rt. Hon. R. J. Seddon, P.C.
Secretary for Labour and Chief Inspector of Factories—E. Tregear
Chief Clerk and Deputy Chief Inspector of Factories—James Mackay
Clerks—F. Rowley, J. W. Collins, W. H. Hagger
Shorthand Writer and Typist—R. Ritson
Cadets—W. Linklater, Thomas McIntosh
Officer in Charge Women's Labour Department—H. Staveley

INSPECTORS OF FACTORIES.

North Island — J. Shanaghan, H. Ferguson, J. Sinclair, W. J. Blake, W. H. Hagger, Margaret Hawthorne, and 75 local Inspectors
South Island—J. Shanaghan, J. Lomas, L. D. Browett, C. E. Aldridge, James Isdell, T. O'Grady, R. S. Bean, J. B. Lindsay, W. H. Hagger, Margaret Hawthorne, and 70 local Inspectors
(There are also 200 Bureau Agents in different parts of the colony.)

PUBLIC WORKS DEPARTMENT.

HEAD OFFICE.

Minister for Public Works—Hon. W. Hall-Jones
Under-Secretary—H. J. H. Blow
Engineer-in-Chief—W. H. Hales
Superintending Engineer—P. S. Hay, M.A., M.Inst.C.E.
Inspecting Engineer—R. W. Holmes, M.Inst.C.E.
Chief Clerk—W. D. Dumbell
Accountant—G. J. Clapham
Land-purchase Officer—H. Thompson
Record Clerk—H. W. H. Millais
Clerks—P. S. Waldie, E. McCarthy, A. Biddell, E. Bold, A. H. Kimbell, N. Jacobs, H. F. Curtis, A. Sampson, C. E. Crawford, G. C. Schmidt, W. McNamara, T. H. Hanna, J. J. Bennett, A. L. Goldfinch, L. White, E. Kidd, K. Webb
Chief Draughtsman—W. G. Rutherford
Architect—J. Campbell
Draughtsmen—T. Perham, E. Jackson, C. A. Lawrence, W. Withers, L. L. Richards, G. W. Phillips, J. Baird, W. G. C. Swan, J. H. Price, A. E. King, R. G. Applegarth, A. F. Macrae, T. S. Lambert, S. T. Silver, F. S. Marchant, W. J. C. Slane, S. W. M. Somerville, A. T. Ford
Head Storekeeper—John Young
Engineering Cadets—F. G. Hay, H. T. Thompson
Clerical Cadet—W. S. King
Clerical Cadettes—E. M. B. Lynch, E. J. Colquhoun

DISTRICT OFFICES.

District Engineers—Auckland, C. R. Vickerman; Dunedin, E. R. Ussher, M.Inst.C.E.

Resident Engineers—Hunterville, G. L Cook, M.Inst.C.E.; North Island Main Trunk Railway, J. D. Louch; Nelson, W. A. Shain; Westport, R. A. Young, Assoc. M. Inst.C.E.; Greymouth, J. Thomson, B.E.; Springfield, W. H. Gavin, Scargill, J. A. Wilson

Assistant Engineers—J. J. Hay, M.A.; S. J. Harding, J. H. Dobson, F. M. Hewson, J. Hannah, J. H. Lewis, G. C. McGlashan, C. E. Armstrong, F. H. Geisow, F. W. Furkert, W. Widdowson, H. Dickson, J. W. E. McEnnis, A. Ross, J. V. Haskell, C. A. Owen, J. W. Thomson, J. Meenan, A. Stewart, W. P. Moynihan, W. A. Jeff, W. Sherratt, C. J. McKenzie, F. P. Bartley

Engineering Cadets—J. J. Wilson, H. Vickerman, F. S. Dyson, J. Wood, L. B. Campbell, J. McNair, J. Norris, P. McNab, P. Keller, H. H. Sharp

Draughtsmen—C. Wood, W. A. Cumming, P. F. M. Burrows, W. H. Hislop, T. J. McCosker, J. J. Fraser, J. B. Robertson, H. C. W. Wrigg, A. Wood, W. G. Harding

Clerks—W. Black, C. T. Rushbrook, A. R. Stone, A. J. Sutcliffe, E. Waddell, J. H. Denton, J. B. Borton, L. P. Cabot, F. E. Banks, H. Grave, G. T. Grace, E. G. Beale, E. Crouch, J. A. White, P. P. Giesen, W. E. Fitzgerald, L. M. Shera, H. M. O'Donnell, S. A. Holland, A. D. Park, E. J. Edwards

Storekeepers—T. Douglas, J. C. Fulton, S. J. Moncrieff

RAILWAYS DEPARTMENT.

Minister for Railways—Hon. Sir J. G. Ward, K.C.M.G.

General Manager—T. Ronayne

Chief Clerk—R. W. McVilly

Clerks—E. J. Andrews, B. M. Wilson, W. S. Ridler, J. L. Day, W. Johnston, J. Hislop, C. G. Edwards, W. H. Gifford, J. V. Fogo, D. MacKellar, A. J. Will, W. A. Wellings, P. J. McGovern, W. H. Warren, A. N Longton, S. S. Millington, J. D. Nash, H. Gerard, C. T. Reehal, F. C. Fraser, A. J. Levick, W. Rennie

Audit Inspectors—H. Baxter, D. Munro, R. Hislop, jun., I. Faris

Railway Accountant—A. C. Fife

Clerks—H. Davidson, J. H. Davies, G. S. P. Curtis, G. Wilson, J. McLean, E. Davy, A. Morris, C. Batten, J. Firth, W. B. Fisher, E. J. Fleming, H. H. Leopard, R. J. Loe, W. Bourke, T. Pattle, A. J. Belworthy, F. W. Lash, A. H. Hunt, W. E. Ahern, F. K Porteous, A. D. C. Gosman, T. A. O'Connor, A. E. Wilson, J. W. Dayman, W. H. Simmons, J. B. Gauntlett, A. T. Parkes

Stores Manager—G. Felton

Stores Audit Inspector—F. J. Dawes

Clerks—M. C. Rowe, G. H. Norie, C. F. F. A. R. Isherwood, S. Alpe, H. W. Barbor, W. G. Wray, R. P. Bray, J. T. Bain, L. G. Porter, G. H. Stubbs, A. F. Spiller, J. R. Robertson, J. Kerr, J. Brabiner, J. Hayes, J. Ginnane, V. C. Hardie

Chief Traffic Manager—W. H. Gaw

Relieving District Traffic Manager—W. Stringleman

Clerks—J. E. Armstrong, G. A. C. Robieson, J. E. Widdop, T. T. Halbert

Traffic Superintendents—Wellington, T. Arthur; Dunedin, A. Grant

District Managers—Whangarei, E. E. Gillon; Auckland, H. Buxton; Wanganui, S. F. Whitcombe; Westland, F. W. Styles; Christchurch, T. W. Waite; Invercargill, C. A. Piper

Stationmasters in charge—Kawakawa, J. T. Parsons; Kaihu, R. B. Peat; Gisborne, G. G. Wellsted; Westport, T. Hay-Mackenzie; Nelson, E. G. Wilson; Picton, T. S. Edwards

Chief Engineer for Working Railways—J. Coom, M.Inst.C.E.

Inspecting Engineer—J. Burnett, M.Inst. C.E.

Signal Engineer—H.J.Wynne, A.M.Inst. C.E.

Railway Land Officer—E. G. H. Mainwaring

Inspector of Bridge Construction—A. H. Alabaster

Electrician—J. T. Fahy

Electric Mechanician—T. Hendry

Office Engineer—G. A. Troup

Draughtsmen—J. Besant, C. T. Jeffreys, W. R. B. Bagge, Ad. Howitt, L. Reynolds, A. S. Henderson, W. W. Fry, W. R. Davidson, G. G. Wilson, jun., E. Casey

Clerks—W. P. Hicks, J. T. Ford, W. A. Mirams, H. Jessup, T. H. Wilson, E. S. Kelly, H. W. Rowden, T. M. Lucy, H. H. Gardner, J. M. Robb,

F. J. Rowden, E. D. Richards, W. B. O'Brien, G. P Parrell, H. McAlister, J. A. F. Cundy, V. W. W. Venimore, F. T. A. Williams, W. B. Clark

District Engineers — Auckland, C. H. Biss; Wanganui, D. T. McIntosh; Wellington, A. C. Koch; Westport and Westland, F. J. Jones; Christchurch, H. Macandrew; Dunedin, F. W. MacLean; Invercargill, A. J. McCredie

Chief Mechanical Engineer—A. L. Beattie

Clerks—J. P. Kelly, R. Aekins, D. D. Weir, J. Rumgay, H. McKeowen, H. B. Sturmer, C. L. Pettit, A. J Bland, J. H. Leopard, J. P. McKeowen, W. Somerville, E. S. Stringleman, N. E. White, J. Linehan

Chief Draughtsman—G. A. Pearson

Draughtsmen—R. Pye-Smith, G. Wilson, A. Smellie, F. H. Bell, J. M. Porteous

Boiler Inspector—J. W. Nichols

Locomotive Engineers—Auckland, A. V. Macdonald; Wellington-Napier-New Plymouth, T. A. Peterkin; Hurunui-Bluff, H. H. Jackson; Westport and Westland, G. E. Richardson. Relieving, J. D. Harris, F. T. Murison

Brake Engineer—J. H. Fox

Relieving Foreman—R. Simpson

Board of Appeal.

North Island.

H. Eyre-Kenny, Stipendiary Magistrate. Chairman, appointed by the Governor

H. Davidson, Railway Accountant's Office, elected

T. Wilson, Engineman, elected

M. J. Mack, Guard, elected

W. Austin, Leading Carpenter, elected

W. Morrison, Ganger, elected

Middle Island.

C. D. R. Ward, District Judge, Chairman, appointed by the Governor

T. W. Brebner, Stationmaster, elected

A. Dunn, Guard, Christchurch, elected

J. A. McCullough, Leading Tinsmith, elected

T. Milroy, Engineman, elected

R. Duncan, Sub-ganger, elected

POST AND TELEGRAPH DEPARTMENT.

General Post Office.

Postmaster-General and Electric Telegraph Commissioner—Hon. Sir J. G. Ward, K.C.M.G.

Secretary—W. Gray

Superintendent of Electric Lines—J. K. Logan

Assistant Secretary and Inspector—T. Rose

Controller of Money-orders and Savings-banks, and Accountant—G. Gray

Chief Clerk—D. Robertson

Assistant Controller Money-Orders and Savings-Banks, and Assistant Accountant—W. R. Morris

Clerks, Secretary's Office—F. V. Waters, H. Plimmer, J. C. Williamson, W. Crow, V. J. Brogan, T. Ward, H. D. Grocott, J. C. Redmond, A. T. Markmann, W. J. Gow, F. W. Furby, J. B. Jordan, S. Macalister, J. P. P. Clouston, W. H. Barnett, A. Donovan

Mail Agents—W. Isbister, D. E. Lindsay (acting)

Clerks, Inspector's Branch—G. V. Hudson, J. Brennan, W. A. Tanner, F. S. Robins, S. M. Harrison, G. P. Edwards, H. McGill

Clerks, Accountant's Branch — J. L. H. Ledger, H. A. R. Huggins, G. W. Moorhouse, W. Callaghan, W. Chegwidden, R. J. Thompson, H. Cornwall, F. Perrin, J. J. Esson, D. A. Jenkins, H. N. McLeod, J. D. Avery, C. B. Harton, W. J. Drake, J. G. Roache, J. Coyle, F. W. Faber, F. E. Beamish, P. J. Kelleher, A. C. Elliott, G. H. Harris, H. C. Milne, C. W. J. Panting, H. C. Hickson, P. D. Hoskins, W. R. Wakelin, F. Stewart, G. G. Rose, G. T. Withers, H. E. Combs, J. E. Hull, A. Marshall, F. G. A. Eagles, C. G. Collins, T. M. Highet, E. C. Gamble, J. C. A. Dudley, T. H. N. Beasley, W. I. Dawson, W. K. Frethey, J. Snell, W. Gilbert, G. L. Messenger, T. A. Churches, C. H. Clinkard, J. M. Dale, H. A. Lamb, R. Porteous, D. Rutherford, A. Edwards, A. Baskiville, R. W. Penfold, W. A. Smith, R. H. Twose, E. White, C. Gamble, J. Madden, J. Alexander, P. Cutforth, A. Leeden, E. Bermingham, S. Brock, E. Harris, B. M. Kenny, V. Johnston, M. A. MacLeod, C. Smith, M. A. Asquith, E. E. Warren

Electrician—T. Buckley

Assistant Electrician—W. E. Chisholm

Mechanicians—R. Heinitz, F. Palmer

Storekeeper—J. Black

Assistant Storekeeper—C. B. Mann

Clerks in Store—C. Nicholls, T. Palmer, W. H. Carter, M. McGilvray, J. G. Howard, W. R. Aekins, J. L. Murphy

Chief Postmasters.

Auckland—J. W. Wilkin
*Thames—W. McHutcheson
*Gisborne—G. W. Sampson
Napier—D. Cumming
*New Plymouth—F. D. Holdsworth
*Wanganui—D. Miller
Wellington—S. J. Jago
*Blenheim—E. Northcroft
*Nelson—S. P. Stevens
*Westport—H. Logie
*Greymouth—C. J. Berry
*Hokitika—J. H. Sheath
Christchurch—J. F. McBeth
*Timaru—J. A. Hutton
*Oamaru—W. W. Beswick
Dunedin—E. Cook
*Invercargill—C. J. A. H. Tipping

Inspectors of Telegraphs.

Auckland—W. G. Meddings
Christchurch—J. W. Gannaway
Dunedin—J. Orchiston
Nelson—C. C. Robertson
Wellington—W. S. Furby

Assistant Inspectors of Post-offices.

P. Curtis (Northern District), W. J. Chaney (Central District), W. St. G. Douglas (Midland District), T. T. King (Southern District)

Officers in Charge of Telegraph Offices.

Auckland—H. F. Seager
Napier—B. H. Keys
Wellington—H. W. Harrington
Christchurch—J. W. Mason
Dunedin—J. G. Ballard

Board of Appeal.

J. McGowan, Commissioner of Taxes, Chairman (by Act)
J. K. Logan, Superintendent of Electric Lines (by Act)
F. M. Scully, Representing Postal Branch, elected
W. F. Young, Representing Telegraph Branch, elected

DEPARTMENT OF TRADE AND CUSTOMS.

Commissioner of Trade and Customs—Hon. C. H. Mills
Secretary and Inspector of Customs and Secretary of Marine—W. T. Glasgow
Chief Clerk—T. Larchin
Clerks, Customs—C. H. Manson, H. S. Cordery, W. A. Cameron
Cadet—G. F. McKellar
Audit—H. W. Brewer, H. Crowther (Writer)

Collectors of Customs.

Auckland—A. Rose
Poverty Bay—W. J. Hawley
New Plymouth—H. Bedford
Napier—E. R. C. Bowen
Wellington—D. Johnston
Wanganui—A. Elliott
Nelson—W. Heaps
Westport—H. R. Spence
Greymouth—C. Colebrook
Hokitika—W. Rose
Lyttelton and Christchurch—J. Mills
Timaru—C. S. Nixon
Oamaru—T. M. Cullen
Dunedin—C. W. S. Chamberlain
Invercargill and Bluff Harbour—A. McDowell

Officers in Charge of Ports, and Coastwaiters.

Thames—T. C. Bayldon, Coastwaiter
Russell—H. Stephenson, Coastwaiter
Tauranga—C. C. Halliday, Officer in Charge
Whangaroa—A. G. Ratcliffe, Coastwaiter
Whangarei—J. Munro, Coastwaiter
Mongonui—H. G. Hunt, Officer in Charge
Hokianga—G. Martin, Coastwaiter
Kaipara—J. C. Smith, Officer in Charge
Waitara—J. Cameron, Coastwaiter
Patea—J. W. Glenny, Officer in Charge
Wairau—H. A. Jackman, Officer in Charge
Picton—T. W. Lecocq, Officer in Charge
Chatham Islands—R. S. Florance, Officer in Charge

MARINE DEPARTMENT.

Minister of Marine—Hon. W. Hall-Jones
Secretary—W. T. Glasgow
Chief Clerk—G. Allport
Clerks—J. J. D. Grix, G. Sinclair
Cadet—B. W. Millier
Marine Engineer for the Colony—W. H. Hales

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*Combined post- and telegraph-offices.

Nautical Adviser and Chief Examiner of Masters and Mates—H. S. Blackburne
Weather Reporter—R. A. Edwin, Com. R.N.
Superintendent of Mercantile Marine and Examiner of Masters and Mates, Auckland—W. D. Reid
Superintendent of Mercantile Marine and Examiner of Masters and Mates —Wellington, G. G. Smith
Superintendent of Mercantile Marine and Examiner of Masters and Mates, Lyttelton—J. A. H. Marciel
Superintendent of Mercantile Marine and Examiner of Masters and Mates, Dunedin—C. E. W. Fleming
Master of s.s. "Tutanekai"—C. F. Post
Master of s.s. "Hinemoa"—J. Bollons

INSPECTORS OF SEA-FISHERIES.

Wellington, Chief Inspector—L. F. Ayson
Russell—H. Stephenson
Whangarei—A. McDonnell
Wanganui—W. J. Campbell
Palmerston North—M. D. Stagpoole
Foxton—J. Forster
Hokitika—J. Duncan
Dunedin—J. McIntyre
Bluff—P. McGrath
Napier—C. H. Pratt

HARBOURMASTERS.*

Collingwood—F. Stallard
Foxton—A. Seabury
Hokianga—G. Martin
Kaipara—J. Christy Smith
Manukau—J. Neale
Motueka—H. L. Moffatt
Picton—T. Edwards
Port Robinson—J. Sinclair
Russell—H. Stephenson
Waitapu—S. Fittall

INSPECTION OF MACHINERY DEPARTMENT.

Chief Inspector of Machinery, Principal Engineer Surveyor, and Chief Examiner of Engineers—R. Duncan, Head Office, Wellington
Chief Clerk—R. P. Milne
Clerk—J. H. Macalister
Extra Clerks—R. G. Stone, W. D. Andrews, J. G. Macpherson, J. M. Healy
Cadet—H. Patterson

Inspectors of Machinery, Engineer Surveyors, and Examiners of Engineers:—
Auckland—H. Wetherilt, S. Dalrymple, G. McGregor
Wellington—H. A. McGregor, A. Calvert, W. R. Douglas, N. D. Hood
Nelson—A. McVicar
Christchurch—P. J. Carman
Timaru—J. Williamson
Dunedin——A. Walker, M. Sharp
Invercargill—A. W. Bethune
Board of Examiners of Stationary, Traction, Locomotive, and Winding Engine Drivers—Robert Duncan, Chief Inspector of Machinery, M.Inst.Nav.A., M.Inst.Soc.A.Lond., Chairman; John Hayes, F.S.G.C., Inspecting Engineer of Mines; P. G. Hay, M.A., M.Inst.C.E.; R. P. Milne, Secretary

STAMP DEPARTMENT.

Commissioner of Stamp Duties—Hon. Jas. Carroll
Secretary for Stamps—C. A. St. G. Hickson
Chief Clerk and Accountant—H. O. Williams
Custodian and Issuer of Stamps—W. H. Shore
Record and Receiving Clerk—J. P. Murphy
Clerks—V. Willeston, J. Murray
Chief Stamper—C. Howe
Cadette—C. McIntosh

DEPUTY COMMISSIONERS OF STAMPS.

Auckland—E. Bamford
Gisborne—C. H. W. Dixon
Taranaki—R. L. Stanford
Hawke's Bay—Thos. Hall
Wellington—C. A. St. G. Hickson
Wanganui—D. Miller
Nelson—W. W. de Castro
Marlborough—C. E. Nalder
Canterbury—P. G. Withers
Timaru—J. A. Hutton
Otago—P. C. Corliss
Southland—W. Wyinks
Westland—V. G. Day

LAND TRANSFER DEPARTMENT AND DEEDS REGISTRY.

Registrar-General of Land and Deeds—G. B. Davy
Secretary, Land and Deeds—C. A. St. G. Hickson

* The more important harbours are controlled by local Boards, not by the Marine Department.

District Land Registrars and Registrars of Deeds.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Wellington—Wm. Stuart
Hawke's Bay—Thos. Hall
Poverty Bay—J. M. Batham
Nelson—H. W. Robinson
Marlborough—C. E. Nalder
Canterbury—G. G. Bridges
Otago—H. Turton
Southland—W. Wyinks
Westland—V. G. Day

Examiners of Titles.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Wellington—H. Howorth
Hawke's Bay—Thos. Hall
Poverty Bay—J. M. Batham
Nelson—H. W. Robinson
Marlborough—C. E. Nalder
Canterbury—G. G. Bridges
Otago—H. Turton
Southland—W. Wyinks
Westland—V. G. Day

Registrar of Joint-stock Companies.

C. A. St. G. Hickson

Registrars of Building Societies, Industrial and Provident Societies, and Assistant Registrars of Joint-stock Companies.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Hawke's Bay—Thos. Hall
Wellington—H. O. Williams
Nelson—W. W. de Castro
Marlborough—C. E. Nalder
Canterbury—P. G. Withers
Otago—P. C. Corliss
Southland—W. Wyinks
Westland—V. G. Day
Poverty Bay—C. H. W. Dixon

EDUCATION DEPARTMENT.

Minister of Education (administering also Native schools, industrial schools, and the institution for deaf-mutes)—Hon. W. C. Walker, C.M.G.
Secretary for Education and Inspector-General of Schools—George Hogben, M.A.
Assistant Secretary—Sir E. O. Gibbes, Bart.
Clerks—F. K. de Castro, R. H. Pope, F. L. Severne, E. C. Banks, F. D. Thomson, B.A., H. J. Barrett, T. G. Gilbert, J. Beck, I. Davey, I. Robertson, C.T. Wild, M. G. D. Grant, G. P. Prichard, J. F. Cooper, F. W. Millar, A. J. H. Benge, J. Turner, K. McKenzie
Inspector of Native Schools—James H. Pope. Organizing Instructor—W. W. Bird, M.A.
Inspectors of Technical Instruction—M. H. Browne, E. C. Isaac
Assistant Inspectors of Industrial Schools—R. H. Pope (also clerk), T. A. Walker
Officer in charge of Public School Cadets—Major L. W. Loveday

Education Boards, with Names of Secretaries.

Auckland—V. E. Rice
Taranaki—P. S. Whitcombe
Wanganui—W. J. Carson
Wellington—A. Dorset
Hawke's Bay—G. T. Fannin
Marlborough—J. Smith
Nelson—S. Ellis
Grey—H. Smith, B.A.
Westland—A. J. Morton, B.A.
Canterbury North—H. C. Lane
Canterbury South—J. H. Bamfield
Otago—P. G. Pryde
Southland—J. Neill

School Commissioners

(*Administrators of Education Reserves, with Names of Secretaries*).

Auckland—H. N. Garland
Taranaki—F. P. Corkill
Wellington—J. H. N. Wardrop
Hawke's Bay—E. P. A. Platford
Marlborough—J. Smith
Nelson—A. T. Jones
Westland—A. J. Morton
Canterbury—H. H. Pitman
Otago—C. Macandrew

Industrial Schools.

Government Schools.

Auckland Industrial School—Miss S. E. Jackson, Manager
Wellington Receiving Home—Mrs. E. S. Dick, Manager
Burnham Industrial School (Canterbury)—T. Archey, Manager
Te Oranga Home (Canterbury)—Mrs. E. T. Branting, Manager
Christchurch Receiving Home—Miss A. B. Cox, Manager
Caversham Industrial School (Otago)—G. M. Burlinson, Manager

Private Schools.

St. Mary's Industrial School, Auckland—Rev. G. H. Gillan, Manager
St. Joseph's Industrial School, Wellington—Rev. W. J. Lewis, Manager
St. Mary's Industrial School, Nelson—Very Rev. Dean Mahoney, Manager
St. Vincent de Paul's Industrial School, Dunedin—Right Rev. M. Verdon, Manager

INSTITUTION FOR DEAF-MUTES, SUMNER.

Director—G. van Asch
Steward—H. Buttle

LUNATIC ASYLUMS.

Inspector—Duncan MacGregor, M.A., M.B., C.M.*
Assistant Inspector—Mrs. Grace Neill
Medical Superintendent, Auckland Asylum—R. M. Beattie, M.B.
Medical Superintendent, Christchurch Asylum—E. G. Levinge, M.B.
Medical Superintendent, Porirua Asylum—Gray Hassell, M.D.
Medical Superintendent, Wellington Asylum—W. Baxter Gow, M.D.
Medical Superintendent, Seacliff Asylum—F. Truby King, M.B.
Superintendent, Hokitika Asylum—H. Gribben; Medical Officer, H. Macandrew, M.B.
Superintendent, Nelson Asylum—J. Morrison; Medical Officer, W. J. Mackie, M.D.
Ashburn Hall, Waikari (private asylum)—Proprietors, Dr. Alexander and Executor of James Hume; Medical Officer, Frank Hay, M.B.

MINES DEPARTMENT.

CHIEF OFFICE.

Minister of Mines—Hon. James McGowan
Under-Secretary for Mines—H. J. H. Eliott
Inspecting Engineer—John Hayes
Chief Clerk—T. H. Hamer
Clerk—H. E. Radcliffe
Analyst—J. S. Maclaurin, D.Sc., F.C.S.
Geologist—Alexander McKay, F.G.S.
Assistant Geologist—W. A. McKay
Draughtsman—C. H. Pierard
Shorthand Writer—J. T. Watkins

INSPECTORS OF MINES.

Thames and Auckland Districts—James Coutts; Assistant Inspector, Thomas Ryan: Canterbury, Dunedin, and Southland Districts—E. R. Green; Assistant Inspector, Robert McIntosh; Cadet, H. Paton: West Coast Districts—R. Tennent; Assistant Inspector—A. H. Richards

MINING BUREAU.

Secretary—P. Galvin

MANAGERS OF WATER-RACES.

Waimea-Kumara—A. Aitken
Mount Ida—R. Murray

SCHOOLS OF MINES.

Lecturers and Instructors: Thames—O. G. Adams; Assistant, A. H. V. Morgan, M.A.: Reefton—T. O. Bishop: Coromandel—D. V. Allen: Waihi—P. G. Morgan, M.A.

BOARD OF EXAMINERS UNDER "THE COAL-MINES ACT, 1891."

The Director of the Geological Survey of New Zealand; the Surveyor-General; the Inspecting Engineer of Mines; the Chief Inspector of Machinery, Wellington, James Bishop, Alfred Benjamin Lindop, and G. H. Broome

BOARD OF EXAMINERS UNDER "THE MINING ACT, 1891."

Same official members as above Board, excepting the Chief Inspector of Machinery, Wellington, with the following private members: H. A. Gordon, F.G.S., Auckland; Thomas Aitken Dunlop, Thames; Patrick Quirk Caples, Reefton; and Francis Hodge, Coromandel
The Director of the Geological Survey of New Zealand is Chairman of both Boards, and Mr. T. H. Hamer is the Secretary

GEOLOGICAL SURVEY, MUSEUM, AND OBSERVATORIES.

Minister in Charge—The Hon. Minister of Mines
Director—Sir J. Hector, K.C.M.G., M.D., F.R.S.
Clerk, Curator, and Meteorological Observer for Wellington—A. H. Gore

* Also holds appointment of Inspector of Hospitals and Charitable Institutions.

Astronomical Observer—T. King
Meteorological Observer, Auckland—T. F. Cheeseman, F.L.S.
Meteorological Observer, Dunedin—H. Skey
Meteorological Observer, New Plymouth—G. W. Palmer
Meteorological Observer, Hokitika—A D. Macfarlane
Meteorological Observer, Rotorua—Dr. Kenny
Meteorological Observer, Te Aroha—W. Hill
Meteorological Observer, Lincoln—Geo Gray
Meteorological Observer, Hanmer Plains—J. B. Gould

NEW ZEALAND INSTITUTE.

Manager—Sir J. Hector, K.C.M.G., M.D. F.R.S.
Hon. Treasurer—J. W. Joynt, M.A.
Secretary—A. H. Gore

DEFENCE DEPARTMENT.

Minister of Defence—Rt. Hon. R. J. Seddon, P.C.
Under-Secretary—

Commandant of the N.Z. Forces.

Colonel James Melville Babington, H.M. General Staff (local Major-General)

Staff Officer of Artillery.

Major St. Leger Montgomery Moore, N.Z.M. (Captain R.G.A.)

Acting Staff Officer to the Commandant of the N.Z. Forces.

Major N. L. D'A. Smith, N.Z.M.
Senior Clerk—T. F. Grey
Clerk—A. J. Baker

Commandant Military School of Instruction, Wellington.

Lieut.-Colonel Robert Haylock Owen, N.Z.M. (late Captain, H.M. South Lancashire Regiment)

Defence Store Department.

Storekeeper—J. O'Sullivan

NEW ZEALAND PERMANENT FORCE.

Officer Commanding—Major St. Leger Montgomery Moore, N.Z.M. (Captain R.G.A.)

Royal New Zealand Artillery.

Captain J. E. Hume
Lieutenant H. E. Pilkington
Lieutenant W. P. Wall
Lieutenant M. M. Gardner
Lieutenant G. E. B. Mickle
Lieutenant R. O. Chesney
Lieutenant S. G. Sandle

Inspectors of Submarine Mining Establishments.

Captain William Coyle, late Coast Brigade, R.E.

Royal New Zealand Engineers.

Captain William Coyle, late Coast Brigade, R.E.
Lieutenant F. Symon
Lieutenant R. B. Smythe

Surgeon, Permanent Force (Wellington).

John Teare, M.B.

Surgeon, Permanent Force (Auckland).

John A. Laing, M.D.

Surgeon, Permanent Force (Lyttelton).

C. H. Upham, M.R.C.S.E.

Honorary Surgeon, Permanent Force.

Patrick J. O'Neill O'Carroll, L.R.C.S.I.

Honorary Chaplain, Lyttelton Detachment Permanent Force.

The Rev. E. E. Chambers

Honorary Chaplain, Wellington Detachment Permanent Force.

Officers Commanding Militia and Volunteer Districts, and Adjutants.

Auckland—Brevet-Colonel Richard Hutton Davies, C.B., N.Z.M.
Wellington — Brevet-Colonel William Holden Webb, N.Z.M., late H.M. 109th Foot; Adjutant, Captain L. J. Joyce, N.Z.M.
Canterbury — Colonel Thomas William Porter, C.B., N.Z.M.
Otago — Brevet-Colonel Alfred William Robin, C.B., N.Z.M.
Nelson (temporary)—Major George Cecil Burleigh Wolfe, N.Z.M., late Captain R.M.L.I.; Adjutant, Lieut. Sydney Vincent Trask, N.Z.M.

DEPARTMENT OF LANDS AND SURVEY.

HEAD OFFICE.

Minister of Lands—Hon. Thomas Young Duncan
Surveyor-General and Secretary for Crown Lands—J. W. A. Marchant
Under-Secretary for Crown Lands—W. C. Kensington
Chief Draughtsman—F. W. Flanagan
Chief Clerk—F. T O'Neill
Auditor of Land Revenue—W. G. Runcie
Accountant—R. A. Paterson
Superintendent of Village Settlements—J. E. March

AUCKLAND DISTRICT.

Assistant Surveyor-General, Chief Surveyor, and Commissioner of Crown Lands—G. J. Mueller
District Surveyors—L. Cussen, J. Baber, jun., G. A. Martin, H. D. M. Haszard, T. K. Thompson
Assistant Surveyors—R. S. Galbraith, D. A. I. Barron, H. F. Edgecumbe, H. T. Mitchell
Chief Draughtsman—C. R. Pollen
Receiver of Land Revenue—T. M. Taylor

HAWKE'S BAY DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—E. C. Gold Smith
District Land Officer, Gisborne, F. S. Smith
District Surveyors—F. S. Smith, James Hay, P. A. Dalziel
Assistant Surveyor—T. Brook
Chief Draughtsman—F. Simpson
Receiver of Land Revenue—F. Bull

TARANAKI DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—J. Mackenzie
District Surveyors—H. M. Skeet, G. H. Ballard
Assistant-Surveyors—J. F. Frith, W. T. Morpeth, R. W. Watson
Chief Draughtsman—J. Langmuir
Receiver of Land Revenue—G. P. Doile

WELLINGTON DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—J. Strauchon
District Surveyors—J. D. Climie, F. A. Thompson, H. J. Lowe, W. J. Wheeler, J. McKay
Assistant Surveyors—J. R. Strachan, H. E. Girdlestone, E. A. Marchant
Chief Draughtsman—L. Smith
Receiver of Land Revenue—T. G. Waitt

NELSON DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—W. G. Murray
District Surveyors—J. A. Montgomerie, J. Snodgrass, R. T. Sadd
Assistant Surveyors—J. D. Thomson, W. C. McAlister
Chief Draughtsman and Receiver of Land Revenue—H. Trent

MARLBOROUGH DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—C. W. Adams
District Surveyor—D. W. Gillies
Assistant Surveyor—H. Maitland
Chief Draughtsman and Receiver of Land Revenue—W. Armstrong

WESTLAND DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—G. J. Roberts
Assistant Surveyor—W. Wilson
Chief Draughtsman—T. M. Grant
Receiver of Land Revenue—A. D. A. Macfarlane

CANTERBURY DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—T. Humphries
District Surveyors—T. N. Broderick, G. H. M. McClure
Chief Draughtsman—C. B. Shanks
Receiver of Land Revenue—A. A. McNab

OTAGO DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—David Barron
District Surveyors—E. H. Wilmot, D. M. Calder, W. T. Neill
Chief Draughtsman—S. Thompson
Receiver of Land Revenue—G. A. Reade

SOUTHLAND DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—John Hay
District Surveyor—L. O. Mathias
Assistant Surveyor—A. Hodgkinson
Chief Draughtsman—G. Robinson
Receiver of Land Revenue—H. L. Welch

MEMBERS OF LAND BOARDS.

Auckland—G. J. Mueller, R. Thompson, D. Lundon, J. Renshaw, A. R. Harris
Hawke's Bay—E. C. Gold Smith, C. Hall, T. Hyde, R. R. Groom, G. Mathewson
Taranaki—J. Mackenzie, J. Heslop, James Rattenbury, J. B. Connett, J. McCluggage
Wellington—J. Strauchon, A. W. Hogg, A. Reese, J. Stevens, T. H. Robinson
Nelson—W. G. Murray, O. Lynch, R. Kerr, J. S. Wratt, G. Walker
Marlborough—C. W. Adams, J. Redwood, A. P. Seymour, H. M. Reader, G. Renner
Westland—G. J. Roberts, A. Matheson, J. Chesney, J. S. Lang, A. Cumming
Canterbury—T. Humphries, A. C. Pringle, J. Sealy, J. Allan, J. Stevenson
Otago—D. Barron, H. H. Kirkpatrick, H. Clark, J. Duncan, W. Dallas
Southland—J. Hay, A. Kinross, J. McIntyre, A. Baldey, D. King

DEPARTMENT OF ROADS.

HEAD OFFICE.

Minister in Charge—Hon. T. Y. Duncan
Chief Engineer of Roads—C. W. Hursthouse
Chief Clerk—W. S. Short
Chief Accountant—H. J. Knowles

District Officers.

Road Surveyors—Auckland, A. B. Wright; Te Kuiti, T. Burd; Rotorua, A. C. Turner; Hawke's Bay, D. N. McMillan; Taranaki, G. T. Murray; Wanganui, R. H. Reaney; Wellington, G. F. Robinson; Marlborough, C. H. Williams; Canterbury, F. Wither; Otago, W. D. R. McCurdie; Southland, J. H. Treseder

"THE LAND FOR SETTLEMENTS ACT, 1894."

BOARD OF LAND PURCHASE COMMISSIONERS.

Chairman of Board and Land Purchase Inspector—Alexander Barron.

The Board consists of the Land Purchase Inspector as Chairman, the Surveyor-General, the Commissioner of Taxes—these for the whole colony—with the Commissioners of Crown Lands and a member of the Land Board in each land district, who are members only for the business arising within their respective districts.

DEPARTMENT OF AGRICULTURE.

Minister in Charge—Hon. T. Y. Duncan

HEAD OFFICE.

Secretary of Agriculture and Chief Inspector of Stock—John D. Ritchie
Chief Clerk—Richard Evatt
Clerk in Charge of Correspondence Branch—F. S. Pope
Clerk in Charge of Accounts Branch—J. E. D. Spicer
Compiler of Statistics—E. B. Burdekin
Clerks—Correspondence Branch: F. C. Hjorring, R. W. Atkinson, D. Sinclair, T. D. H. Hall, W. A. Pye. Accounts Branch—E. Fitzgibbon, F. C. Matthews, A. Calcott, T. R. Walton, S. T. K. Sharp, S. T. Evatt, A. McTaggart, O. Reid. Statistics Branch—A. C. Philpott

LONDON OFFICE.

Produce Commissioner, London—H. C. Cameron
Clerk—R. H. Hooper

VETERINARY DIVISION.

Pathologist and Chief Veterinarian—J. A. Gilruth, M.R.C.V.S.
Assistant Chief Veterinarian—C. J. Reakes, M.R.C.V.S.
Laboratory Assistant—G. H. Barker
Clerks—H. E. Carey, D. L. Luxford, C. Aston
Veterinarians (Ms.R.C.V.S.)—H. C. Wilkie (F.R.C.V.S., F.Z.S.), Dunedin; J. G. Clayton, J. Lyons, Auckland; A. R. Young, Hawera; S. Burton, Masterton; J. McKie, Wellington
Veterinarians and Meat Inspectors (Ms.R.C.V.S.)—A. Crabb, Christchurch; D. H. Rait, Hastings; C. R. Neale, Belfast; J. R. Charlton, Islington; T. G. Lilico, Timaru, J. A. K. Towers, Ngahauranga; D. Machattie, Ashburton; J. Kerrigan, Invercargill; V. A. Bankes, Wanganui; F. C. Robertson, Palmerston N.; W. H. Hawthorn, Gisborne; W. G. Taylor, Napier; W. D. Snowball, Dunedin; A. W. Barnes, Nelson; T. Cunningham, Mataura; D. Spilman, Petone; F. Glover, Picton
Meat Inspectors—H. S. S. Kyle, Invercargill; H. Marsack, Auckland; F. Beattie, Paeroa; W. A. P. Sutton, Thames; C. J. Barron, Blenheim; G. W. Mitchell, Lyttelton

Assistant Meat Inspectors — A. G. Howard, A. D. Gillies, E. T. B. Worthy, G. Thomson, J. Millea, J. Jarman, W. H. Rodney, G. W. Rait, B. Thomson, H. W. Binney, J. Preston, B. Ferguson, G. Thomson, T. J. Reakes, C. J. Stone, T. Anderson

Dairy Division.

Dairy Commissioner—J. A. Kinsella
Clerk—D. Bray
Dairy Instructors—D. J. McGowan, W. M. Singleton, A. G. Shirley
Dairy Instructors and Dairy-produce Graders, D. Cuddie, D. Dickie, Wellington; S. A Dumbleton, T. C. Brash, New Plymouth
Dairy-produce Graders—A. A. Thornton, Lyttelton and Port Chalmers; J. Johnston, New Plymouth; E. Townshend, Auckland
Clerks to Graders—E. A. Dowden, G. W. Otterson, J. Hutton

Biological and Horticultural Division.

Biologist—T. W. Kirk, F.L.S.
Clerks—J. H. Kingdon, B. Quirk
Viticultural Expert—R. Bragato
Assistant Entomologist—Auckland, Captain T. Broun, F.E.S.
Pomologists — North Island, W. J. Palmer, W. A. Boucher. South Island, J. C. Blackmore
Fruit Inspectors—Auckland, Captain T. Broun, F.E.S.; Wellington, H. Palethorpe; Christchurch, A. C. Smale; Dunedin, A. F. Cargill

Chemical Division.

Chemist—B. C. Aston, F.C.S.
Assistant Chemist — H. W. Lawrence, F.C.S.
Laboratory Assistant—G. B. Williams

Poultry Division.

Poultry Expert—D. D. Hyde
Clerk—A. E. Rowden
Poultry Graders — Auckland, R. W. Pounsford; Wellington, T. Burke; Christchurch, S. Newton; Dunedin, T. F. Leihy
Poultry-station Managers—Ruakura, C. Cussen; Momohaki, H. C. Collett; Burnham, W. S. McRae; Milton, J. W. Stewart

Fibre Division.

Chief Hemp Grader—C. J. Fulton.
Hemp Graders—Auckland, W. H. O. Johnston; Wellington, R. T. Bell; Bluff, W. J. Shea
Clerk, Wellington—H. Wynn-Williams

Experimental Farms.

Overseers — Waerenga, N. Kensington; Ruakura, M. Mulcahy; Weraroa, G. Ross; Momohaki, F. Gillanders
Clerks—Ruakura, J. S. Edgecumbe; Weraroa, P. W. Goldsmith; Momohaki, J. Fleming

Live-stock Quarantine Stations.

Caretakers — Auckland, A. Dickson; Wellington, J. P. Ross; Lyttelton, W. J. Thomas

Inspectors of Stock.

(Inspectors under the Dairy Industry, Noxious Weeds, Rabbit Nuisance, Slaughtering and Inspection, and Stock Acts. Those marked * are also Registrars of Brands)

Auckland District — Ohaeawai, D. A. Graham; Whangarei, *J. T. Stone; Auckland, *E. Clifton (in charge of district), F. H. Brittain, R. Hull Hamilton, *D. Ross; Kihikihi, J. Kerr; Tauranga, A. H. Burkill
Hawke's Bay District — Gisborne, *C. Thomson and D. Fleming; Wairoa, *W. R. Rutherfurd; Napier, *W. Miller (in charge of district); Hastings, F. G. Wayne; Woodville, J. Harvey
Wairarapa District—Masterton, *G. H. Jenkinson (in charge of district); Carterton, T. C Webb
Wellington District — Wellington, *A. Mills (in charge of district), J. Drummond (port)
Manawatu District—Palmerston North, *J. Duncan (in charge of district)
West Coast (North Island) District—Hunterville, V. A. Huddleston; Wanganui, *A. K. Blundell (in charge of district); Hawera, *J. W. Deem; Stratford, J. Budge; New Plymouth, R Rowan
Marlborough District — Blenheim, *J. Moore (in charge of district)
Canterbury District — Rotherham, *J. Munro; Rangiora, C. A. Cunningham; Christchurch, *H. T. G. Turner (in charge of district); Lincoln, J. C. Miller; Ashburton, B. Fullarton; Timaru, J. C. Huddleston; Fairlie, W. Black

Southern District — Dunedin, T. A. Fraser, Assistant Chief Inspector in charge of district). *J. E. Thomson (port); Kurow, W. Wills; Oamaru, *A. Ironside; Palmerston South, H. Hill; Mosgiel, R. I. Gossage; Naseby, C. Shaw; Clyde. *S. M. Taylor; Lawrence, *G. McLeod; Milton, T. Gillespie; Balclutha, J. L. Bruce; Gore, W. Dalgliesh; Invercargill, *R. Wright; Bluff, J. W. Raymond (port); Riverton, T. Gilmour; Queenstown, R Fountain

Westland District — Hokitika, *C. C. Empson (in charge of district)

Nelson District—Richmond, G. S. Cooke; Nelson, *H. McN. Campbell (in charge of district)

Clerks—Auckland, W. C. Robinson (also Registrar of Brands); Napier, R. M. Miller; Masterton, R. J. Harcombe; Wellington, V. A. Mills: Palmerston North, G. A. Ross; Wanganui, D. Bell; Blenheim, G. H. Chrisp; Christchurch, J. Longton, R. F. Crosbie; Lawrence, E. Fowler; Invercargill, J. W. Bell, R. L. Johnston

INSPECTORS UNDER SLAUGHTERING ACT.

(The Inspectors of Stock are also Inspectors under the Slaughtering Act.)

F. Beattie, Paeroa; W. A. P. Sutton, Thames; A. Macpherson, Christchurch

INSPECTORS OF DAIRIES.

(The Inspectors of Stock arealso Inspectors of Dairies.)

Auckland, G. M Williamson; Paeroa, F. Beattie; Thames, W. A. P. Sutton; Napier, J. G. Parker; Wellington, J. Drummond; Lyttelton, G. W. Mitchell; Christchurch, A. Macpherson; Dunedin, W. R. Brown; Nelson, A. T. P. Hubbard

INSPECTORS OF NOXIOUS WEEDS.

(The Inspectors of Stock are also Inspectors of Noxious Weeds.)

Napier, J. G. Parker; Eketahuna, J. Vile; Normanby, J. Heslop; Waitara, J. M. Hignett; Dunedin, W. R. Brown; Invercargill, M. O'Meara; Nelson, A. T. P. Hubbard.

RABBIT AGENTS.

Cambridge, J. S. Scott, R. Alexander; Kihikihi, B. Bayly; Pahiatua, T. Bacon; Masterton, J. Halligan; Alfredton, H. Munro; Carterton, H. S. Ussher; Wellington, W. Ross; Levin, A. C. Hackworth; Blenheim, G. Gee; Kaikoura, F. W. Sutton; Hanmer, D. Ross; Mount Somers, C. Watson; Temuka, W. R. Taylor; Timaru, D. Elliott; Waimate, E. F. Sullivan. Kurow, C. S. Dalgleish; Maheno, F. McKenzie; Inch Valley, M. McLeod; Waikouaiti, A. Munro; Taieri, W. S. Goodall; Sutton, R. Irving; Waipiata, A. Clarke; Clyde, F. Urquhart; Roxburgh, A. F. Keach; Lawrence, W. Johnston; Pembroke, H. A. Munro: Milton, C. Branigan; Owaka, H. McLeod; Tapanui, A. C. Clapcott; Clinton, T. P. Short; Gore, A. Hughes; Lumsden, W. M. Munro; Wyndham, D. McLeod; Invercargill, J. McKellar; Riverton, T. N. Baxter

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VALUATION DEPARTMENT.

Valuer-General—John McGowan

Deputy Valuer-General—G. F. C. Campbell

Chief Clerk—F. J. M. D. Walmsley

Clerk in Charge—A. E. Fowler

Clerks—H. L. Wiggins, G. Halliday, T. T. Bolt, J. Atkinson, E. J. R. Cumming

Draughtsman—H. H. Seed

Supervising Valuers—W. Duncan, Auckland; A. P. O'Callaghan, Christchurch; A. McKerrow, Dunedin; H. Carswell, Invercargill

District Valuers—James I. Wilson, jun., Whangarei; W. Garrett, J. J. Reynolds, Auckland; W. H. Wallis, Hamilton; J. S. Simson, Gisborne; W. E. Griffin, Napier; H. J. C. Coutts, Hawera; S. Hill, New Plymouth; A. Barns, Wanganui; R. Gardner, Palmerston North; J. Fraser, Masterton; J. Ames, Wellington; T. W. Caverhill, Petone; E. Kenny, Picton; J. Glen, Nelson; J. Webster, Hokitika; A. D. Bayfield, Westport; D. Dick, Ashley; H. Murray, Christchurch; A. Freeman, Christchurch; A. Allan, Timaru; E. A. Atkinson, Oamaru; W. L. Craig, Palmerston South; W. Dallas, Balclutha; J. Wright, Dunedin; J. George, Queenstown; John Smaill, Gore; Charles Rout, A. Pyper, Invercargill

Clerks—Auckland, E. W. Watson, T. C. Somers; Christchurch, J. M. Wheeler A. Millar; Dunedin, A. Clothier,; Invercargill, T. Oswin, C. de R. Andrews

Cadets—Auckland, E. Panting; Wellington, F. C. Douglas; Invercargill, D. Corcoran

GOVERNMENT INSURANCE DEPARTMENT.

Commissioner—J. H. Richardson, F.F.A., F.I.A.V.
Assistant Commissioner—D. M. Luckie
Actuary—Morris Fox
Secretary—W. B. Hudson
Chief Medical Officer—T. Cahill, M.D.
Accountant—G. W. Barltrop
Assistant Actuary—P. Muter
Chief Clerk—R. C. Niven
Office Examiner—G. A. Kennedy
Clerks—J. W. Kinniburgh, A. Avery, W. S. Smith, A. H. Hamerton, F. B. Bolt, T. L. Barker, A. L. B. Jordan, H. S. Manning, C. E. Galwey, G. Webb, F. K. Kelling, J. B. Young, H. Rose, R. P. Hood, G. A. N. Campbell, A. T. Traversi, J. A. Thomson, A. de Castro, C. J. Alexander, R. T. Smith, H. L. Levestam, S. P. Hawthorne, J. G. Reid, C. H. E. Stichbury, J. R. Samson, R. Fullerton, A. H. Johnstone, W. H. Woon, G. S. Nicoll, R. S. Latta, T. Fouhy, J. R. Fraser, G. E. Sadd, W. Spence, J. J. Feeney, T. M. Dimant, W. J. Ewart, H. Wylie, M. L. Wilson, B. Trevithick
Chief Messenger—W. Archer

Auckland Agency.

District Manager—W. J. Speight
Chief Clerk—J. K. Blenkhorn
Clerk—C. H. Ralph

Napier Agency.

Resident Agent—J. H. Dean

Wanganui Agency.

Resident Agent—A. E. Allison

Wellington Agency.

District Manager and Supervisor of New Business—G. Robertson
Chief Clerk—M. J. K. Heywood
Clerks—W. C. Marchant, A. M. McDonald

Nelson Agency.

Resident Agent—A. P. Burnes

Greymouth Agency.

Resident Agent—Geo. Crichton

Christchurch Agency.

District Manager—J. C. Prudhoe
Chief Clerk—J. W. H. Wood
Clerks—G. J. Robertson, H. Mouat

Timaru Agency.

Resident Agent—S. T. Wicksteed

Oamaru Agency.

Resident Agent—A. W. G. Burnes

Dunedin Agency.

District Manager—R. S. McGowan
Chief Clerk—O. H. Pinel
Clerk—A. Marryatt

Invercargill Agency.

Resident Agent—J. Findlay

PUBLIC TRUST OFFICE.

Public Trustee—J. W. Poynton
Chief Clerk—A. A. K. Duncan
Solicitor—F. J. Wilson
Assistant Chief Clerk—T. S. Ronaldson
Accountant—T. D. Kendall
Clerks—T. Stephens, P. Fair, C. Zachariah, P. Hervey, E. C. Reeves, W. A. Fordham, A. Purdie, G. A. Smyth, A. J. Cross, E. A. Smythe, J. B. Jack, W. Barr, E. O. Hales, C. Morris, S. W. Smith, C. A. Goldsmith, H. Masters, R. Price, N. M. Chesney, H. Turner, C. M. Calders, O. Beck, M. E. Nash, J. Menzies, E. P. Hay, R. MacGibbon, J. Mackenzie, O. L. Bowley, G. Morris
District Agent, Christchurch — M. C. Barnett; Clerks, W. S. McGovern, G. Purnell, P. A. Devereux, A. R. Hadfield
District Agent, Auckland—E. F. Warren; Clerks, K. N. H. Browne, V. Adams, C. Robinson
District Agent, Dunedin—F. H. Morice; Clerks, J. Allen, T. Young, W. Layburn
District Agent, Greymouth—T. R. Saywell
District Agent, Nelson—E. P. Watkis
West Coast Settlement Reserves Agent and District Agent, New Plymouth—Thomas W. Fisher; Clerks, H. Oswin, G. Campbell

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ADVANCES TO SETTLERS OFFICE.

Superintendent—John McGowan
Deputy Superintendent—G. F. C. Campbell
Chief Clerk—F. J. M. D. Walmsley
Inspecting Accountant—P. Heyes
Clerk in Charge—W. Waddel
Clerks—M. J. Crombie, W. N. Hinchliffe, H. E. Williams, J. E. Thompson, C. B. Collins, W. Auld, A. A.

Prichard, A. W. Knowles, T. W. Foote, H. O'Rourke, C. D. Wilson, J. B. Wallis. Typist—C. D. Fraser

Cadets—R. G. McLennan, A. Tudhope, J. F. O'Leary, T. W. Vickery, J. J. M. Harvey

Chief Valuers—W. Duncan, Auckland; A. P. O'Callaghan, Christchurch; A. McKerrow, Dunedin; H. Carswell, Invercargill

Clerk at Auckland—F. B. Robertson

DEPARTMENT OF PUBLIC HEALTH.

Minister of Health—Hon. Sir J. G. Ward, K.C.M.G.

Director and Chief Health Officer—James M. Mason, M.D., D.P.H.

Assistant Chief Health Officer—Dr. Thomas H. Ambrose Valintine

Native Health Officer—Dr. Maui Pomare

Secretary—E. Horneman

Clerks—H. B. Magrath, T. P. Butler, H. Eastgate, J. W. Taylor, F. Willis. Typistes, Ethel Evans, Gwenllian Craig

Pathologist—J. A. Gilruth, M.R.C.V.S.

Analysts—Wellington, J. S. McLaurin; Auckland, J. A. Pond; Dunedin, J. G. Black; Christchurch, A. W. Bickerton

District Health Officers—Blenheim, Dr. W. Anderson (acting); Napier, Dr. F. I. De Lisle; Auckland, Dr. R. H. Makgill; Dunedin, Dr. F. Ogston; Nelson, Dr. J. P. Frengley; Christchurch, Dr. H. E. Finch; Greymouth, Dr. C. G. Morice

Port Health Officers—Picton, Dr. W. E. Redman; Oamaru, Dr. A. Douglas; Wanganui, Dr. R. C. Earle; Port Chalmers, Dr. G. Hodges; Wellington, Dr. H. Pollen; Westport, Dr. M. Mackenzie; Greymouth, Dr. C. G. Morice; Timaru, Dr. R. S. Reid; Onehunga, Dr. W. G. Scott; Auckland, Dr. E. W. Sharman; Kaipara, Dr. F. M. Purchas; Whangarei, Dr. G. B. Sweet; Bluff, Dr. J. Torrance; Lyttelton, Dr. C. H. Upham; Gisborne, Dr. J. W. Williams; Napier, Dr. T. U. Moore; New Plymouth, Dr. H. A. McClelland.

Sanitary Inspectors—Dunedin, J. G. Gunn; Wanganui, C. A. Schauer; New Plymouth, A. H. Kendall; Auckland, C. C. Winstanley; Napier, M. Kershaw; Nelson, C. Middleton; Christchurch, D. Munro; Invercargill, K. Cameron; Marton, F. C. Wilson; Masterton, G. H Dolby.

Cadets in Government Service to be Volunteers.

Cadets in the Civil Service are required, after arriving at the age of eighteen years, to serve for three years in a Volunteer corps. Heads of departments are required to see that cadets who come within the regulations join the Volunteer Force, and serve for the period named, and also to notify the Under-Secretary for Defence of the appointment of all cadets coming within this regulation.

ECCLESIASTICAL.

THERE is no State Church in the colony, nor is State aid given to any form of religion. Government in the early days set aside certain lands as endowments for various religious bodies, but nothing of the kind has been done for many years past.

CHURCH OF THE PROVINCE OF NEW ZEALAND, COMMONLY CALLED THE "CHURCH OF ENGLAND."

Bishops.

The Right Reverend Moore Richard Neligan, D.D., Auckland; consecrated 1903.

The Right Rev. William Leonard Williams, D.D., Waiapu; consecrated 1895.

The Right Rev. Frederic Wallis, D.D., Wellington; consecrated 1895.

The Right Rev. Charles Oliver Mules, M.A., Nelson; consecrated 1892.

The Right Rev. Churchill Julius, D.D., Christchurch; consecrated 1890.

The Right Rev. Samuel Tarratt Nevill, D.D., Dunedin; consecrated 1871, acting Primate.

The Right Rev. Cecil Wilson, M.A., Melanesia; consecrated 1894.

ROMAN CATHOLIC CHURCH.

Archbishop.

The Most Rev. Francis Redwood, S.M., D.D., Archbishop and Metropolitan, Wellington; consecrated 1874.

Bishops.

The Right Rev. George Michael Lenihan, D.D., Auckland; consecrated 1896.

The Right Rev. John Joseph Grimes, S.M., D.D., Christchurch; consecrated 1887.

The Right Rev. Michael Verdon, D.D., Dunedin; consecrated 1896.

ANNUAL MEETINGS AND OFFICERS.

The principal present heads or officers of the various churches, and the places and times of holding the annual or periodical assemblies or meetings, are as follow:—

Church of England.—For Church purposes, the colony is divided into six dioceses, viz.: Auckland, Waiapu, Wellington, Nelson, Christchurch, and Dunedin. The General Synod meets every third year in one or other of the dioceses. Representatives attend from each diocese, and also from the diocese of Melanesia.—President,

the Bishop of Dunedin, acting Primate. The Diocesan Synods meet once a year, under the presidency of the Bishop of the diocese. The next General Synod will be held in Auckland, on the 28th January, 1904.

Roman Catholic Church.—The diocese of Wellington, established in 1848, was in 1887 created an Archdiocese and the metropolitan see. There are three suffragan dioceses—Auckland, Christchurch, and Dunedin. A Retreat is held annually in each of the four dioceses, at the end of which a Synod is held, presided over by the Bishop, and at which all his clergy attend.

In January, 1899, the first Provincial Council of New Zealand was held in Wellington, under the presidency of the Metropolitan, and attended by all the Suffragan Bishops, and a number of priests elected specially in each diocese as representatives of the whole Catholic clergy in the colony. The decrees of this Council were approved by Rome in April, 1900, were published on 1st January, 1901, and are now binding in every diocese in New Zealand.

Presbyterian Church of New Zealand.—The General Assembly will meet on the second Tuesday of November, 1903, in First Church, Dunedin; and thereafter, on ordinary occasions, alternately in Wellington and Dunedin. Moderator, the Rev. James Paterson, Wellington; Clerk and Treasurer, Rev. David Sidey, D.D., Napier; Theological Professors, Rev. John Dunlop, M.A., D.D., and Rev. Michael Watt, M.A., D.D; and Mr. James Dunbar, tutor in Greek.

Methodist Church of Australasia in New Zealand.—The annual New Zealand Conference meets on or about the last Tuesday in February, the exact date being determined by the President, who holds office for one year. Each Conference determines where the next one shall assemble. President (1903–4), Rev. J. A. Luxford, Lyttelton; Secretary, Rev. S. Lawry, Palmerston North. The next Conference is to meet in Pitt Street Church, Auckland.

Primitive Methodist Church.—A Conference takes place every January. The next is to be held at Wanganui, commencing 7th January, 1904. The Conference officials for the present year are: President, Rev. G. Clement, Geraldine; Vice-President, Wm. King, Esq., Dunedin; Secretary, Rev. P. J. Cossum, Bluff; Hon. District Secretary, Mr. D. Goldie, Pitt Street, Auckland; Treasurer of Mission Funds, Mr. Joseph Watkinson, Mangere, Auckland.

Baptist Union of New Zealand.—President, Rev. R. S. Gray, Christchurch; Vice-President, H. M. Smeeton, Esq., Auckland; Treasurer, Mr. A. Chidgey, Kirwee. The Union comprises 35 churches, 21 preaching-stations, 3,721 members, and a constituency of 17,000. The denominational organ is the *New Zealand Baptist*, Editor, Rev. F. W. Boreham, Mosgiel. A Foreign Missionary Society, with an average income of £1,200, employs a doctor, a missionary, three zenana ladies, and 13 native helpers. The sphere of operations is in North Tipperah, East Bengal.

Congregational Union of New Zealand.—The annual meetings are held during the month of February, at such place as may be

decided on by vote of the Council. Chairman for 1903–1904, Rev. W. A. Evans, Wellington; Chairman-elect, Rev. John Wilkins, Auckland; Secretary, Rev. A. T. Lee, Devonport, Auckland, Treasurer, Mr. W. H. Lyon, Auckland; Registrar, Mr. F. Meadowcroft, Wellington; Head Office, Auckland. In 1904 the meeting of the Council will be held at Wellington. The Committee of the Union meets in Auckland on the second Tuesday of each month.

Hebrews.—Ministers: Rev. S. A. Goldstein, Auckland; Rev. H. van Staveren, Wellington; Rev. I. Zachariah, Christchurch; Rev. A. T. Chodowski, Dunedin; Mr. Alexander Singer, Hokitika. Annual meetings of the general Congregations are usually held at these places during the month of Elul (about the end of August).

DEFENCES, MILITARY AND NAVAL.

THE defence forces consist of the Royal N.Z. Artillery and Royal N.Z. Engineers, and the auxiliary forces of Volunteers, Field Artillery, Garrison Artillery, Engineers (submarine mining and field), Mounted Rifles, Rifle, Cycle, Bearer companies, and Defence Rifle Clubs. There is a Commander of the Forces, who is an Imperial officer. A Royal Artillery officer is Staff Officer for Artillery. To the Under-Secretary for Defence all questions of expenditure are referred.

MILITARY INSTRUCTION.

A School of Military Instruction has been established at Wellington.

MILITIA AND VOLUNTEER DISTRICTS.

The two islands (North and Middle) are divided into five districts, each commanded by an officer of Field rank, with a staff of drill-sergeants.

ROYAL N.Z. ARTILLERY.

This Force is divided into four detachments, which are stationed at Auckland, Wellington (head-quarters), Lyttelton, and Dunedin; their principal duties are to look after and take charge of all guns, ordnance stores, ammunition, and munitions of war at these four centres. The Force has an establishment of 240 rank and file.

ROYAL N.Z. ENGINEERS.

This branch is divided between Auckland and Wellington, and has an establishment of 96 of all ranks. They have charge of two submarine mining steamers of the "Sir F. Chapman" class, and of all submarine mining stores.

VOLUNTEERS.—FIELD ARTILLERY.

There are five batteries of Field Artillery (two in the North Island and three in the Middle Island), with a total of 430 of all ranks. They are armed with 15-pounder B.L. and 6-pounder Nordenfeldts, on field-carriages, and go into camp annually for sixteen days.

VOLUNTEERS.—NAVAL AND GARRISON ARTILLERY.

There are five Garrison Artillery Corps in the North Island, and five in the Middle Island, comprising in all a total of 50 officers and 917 rank and file. They go into camp annually for sixteen days.

VOLUNTEERS.—SUBMARINE MINING ENGINEERS.

There are two corps of Submarine Miners in the North Island, of a total strength of 190. These corps also have cutters, &c., provided, and are instructed in rowing, knotting, splicing, signalling, and other duties pertaining to this branch of the service. Attendance at an annual camp is also compulsory.

VOLUNTEERS.—FIELD ENGINEERS.

This branch consists of four corps, with a total of 349 of all ranks, two in the North and two in the Middle Island. Besides carrying rifles they are provided with entrenching tools and all appliances for making and blowing up bridges or laying land-mines.

VOLUNTEERS.—MOUNTED RIFLES.

There are forty-one corps of Mounted Rifles in the North Island and thirty-one in the Middle Island, with a total strength of 5,478 of all ranks. These corps go into camp for an annual training of six days.

VOLUNTEERS.—RIFLE CORPS.

In this branch of the service there are a hundred and twenty corps, fifty-eight being in the North Island and sixty-two in the Middle Island, with a total strength of 7,750 of all ranks, including garrison bands.

VOLUNTEERS.—CYCLE CORPS.

There are Volunteer cycle corps at Auckland, Wellington, Christchurch, Nelson, and Dunedin, of a maximum strength of two officers and twenty-five non-commissioned officers, rank and file: they are attached to the infantry battalions at those centres.

VOLUNTEERS.—BEARER CORPS.

Volunteer bearer corps at Auckland, Wellington, Christchurch, and Dunedin are of a maximum strength of three officers and fifty non-commissioned officers, rank and file. There is also a bearer corps at Nelson of a maximum strength of two officers and twenty-five non-commissioned officers, rank and file.

VOLUNTEERS.—CADET CORPS.

There is a force of forty-one cadet corps—viz., twenty-one in the North Island and twenty in the Middle Island.

Defence Rifle Clubs.

These have lately been established by the Government. Members can purchase rifles at cost price from Government. An annual grant of ammunition is made to those members who fulfil conditions as to quarterly drills. There are 111 rifle clubs, comprising about 2,300 men.

Arms, etc.

The whole of the adult portion of the Force have Lee-Enfield carbines or rifles; Cadets being armed with Martini-Enfield and Snider carbines. Defence rifle clubs are armed with Martini-Enfield rifles.

Enrolment, etc.

Members of the Permanent Forces are enrolled to serve for a period of eight years from enrolment, the last three years of such being in the Reserve; adult Volunteers for three years. The Permanent Forces are principally recruited from men who have one year's efficient service in the Volunteers. After passing the gunnery and other courses and serving three years in the Permanent Forces the men are eligible for transfer to police and prison services.

Instructors.

The Instructors for artillery and engineer and submarine mining corps are obtained from the School of Gunnery at Shoeburyness, and from the Royal Engineers, under a three years' engagement, on completion of which they return to their regiments.

Capitation.

An annual capitation of £2 10s. is granted to each efficient Volunteer, and 5s. to each efficient cadet. One hundred and fifty rounds of ball-cartridge are issued each year free to every adult Volunteer, and twenty-five rounds to each cadet over thirteen years of age.

Administration.

The defence forces of New Zealand are administered under "The Defence Act, 1886," and "The Defence Act Amendment Act, 1890."

Expenditure on the Establishment and Maintenance of Defences from 1897–98 to 1901–1902.*

Year.	Military Expenditure.	Harbour Defences.	Total.
	£	£	£
1897–98	83,004	2,525	85,529
1898–99	114,789	10,158	124,947
1899–1900..	184,970	5,328	190,298
1900–1901..	156,218	3,960	160,178
1901–1902..	250,478	6,678	257,156
1902–1903..	292,081	6,126	298,207

* The special expenditure on account of contingents for South Africa is not included.

DÉPÔTS FOR SHIPWRECKED MARINERS.

ELEVEN of the crew of the barque "Spirit of the Dawn," which was wrecked on Antipodes Island on the 4th September, 1893, remained on the island for eighty-eight days without becoming aware of the existence of the dépôt of provisions and clothing for castaways which is established there. Attention is now drawn to the fact that such dépôts are maintained by the New Zealand Government on that island, and on the Auckland, Campbell, Bounty, Kermadec, and Snares Islands.

The following are the positions of the dépôts :—

Auckland Islands.—A dépôt is placed on the south side of Erebus Cove, Port Ross, and another in Camp Cove, Carnley Harbour, and a third at the head of Norman Inlet. One boat is placed on the north-west end of Adams Island, another on Enderby Island, and another on Rose Island.

Campbell Island.—A dépôt is erected in Tucker Cove, Perseverance Harbour, and a boat has been placed at the head of that harbour.

Antipodes Islands.—A dépôt is placed abreast the anchorage on the north-east side of the principal island.

Bounty Islands.—There is a dépôt on the principal island.

Snares Island.—A dépôt has been established on this island in Boat Harbour.

Kermadec Islands.—A dépôt is established on Macaulay Island, near Lava Cascade, on the north-east end of the island, and another on Curtis Island, at the head of Macdonald Cove, on the north-western end of the island.

Finger-posts to indicate the direction of the dépôts have also been put up.

The Government steamer visits the Auckland, Campbell, Antipodes, Bounty, and Snares Islands twice a year, and the Kermadec Islands once a year.

GRAVING DOCKS AND PATENT SLIPS.

VESSELS visiting New Zealand, and requiring docking or repairs, will find ample accommodation at the principal ports of the colony.

There are in New Zealand four graving-docks; two of these are situated in Auckland, one at Lyttelton, and one at Port Chalmers.

AUCKLAND DOCKS.

The Auckland Docks are the property of the Auckland Harbour Board, and cost, with machinery, appliances, &c., £250,300. The dimensions of the docks at Auckland are as follow :—

	Calliope Dock.	Auckland Dock.
Length over all	525 feet.	312 feet.
Length on floor	500 "	300 "
Breadth over all	110 "	65 "
Breadth on floor	40 "	42 "
Breadth at entrance	80 "	43 "
Depth of water on sill at high water ordinary spring tides)	33 "	13½

Alterations are now being made to the lower altars of Calliope Dock which will enable vessels of 63 ft. beam to be docked without any difficulty.

The following is the scale of charges for the use of the Auckland and Calliope Graving Docks and appliances:—

AUCKLAND GRAVING DOCK.	£	s.	d.
Entrance fee	1	1	0
For every vessel of 100 tons (gross register), or under, per day	4	0	0
For every vessel over 100 tons (gross register), for first 100 tons, per day	4	0	0
For every additional ton (gross register), per day ..	0	0	2
For two or more vessels docking at the same time, the tonnage of which together does not exceed 100 tons (gross register), per day each	2	10	0
For shores cut in docking or hanging the vessel, there must be paid, according to injury done, such amount as may be fixed by the Dockmaster.			
For use of steam-kiln, 10s. per day.			
For use of pitch furnace, 10s. per day.			

CALLIOPE GRAVING DOCK.	£	s.	d.
Entrance fee	5	5	0
For all vessels up to 300 tons (gross register)	20	0	0
For all vessels 301 to 400 tons "	22	10	0
" 401 to 500 tons "	25	0	0
" 501 to 600 tons "	27	10	0
" 601 to 700 tons "	30	0	0
" 701 to 800 tons "	32	10	0
" 801 to 900 tons "	35	0	0
" 901 to 1,000 tons "	37	10	0
" 1,001 to 1,100 tons "	40	0	0
" 1,101 to 1,200 tons "	45	0	0
" 1,201 to 1,300 tons "	50	0	0
" 1,301 to 1,500 tons "	55	0	0
" 1,501 to 2,000 tons "	60	0	0
" 2,001 to 3,000 tons "	65	0	0
" 3,001 to 4,000 tons "	70	0	0
" 4,001 to 5,000 tons "	75	0	0

The foregoing charges are for three days or less. After the third day in dock the following rates are charged:—

For all vessels up to 500 tons (gross register) ..	4d. per ton per diem.
For all vessels of 501 tons to 1,000 tons	3d. "
For all vessels over 1,001 tons up to 2,000 tons ..	2½d. "
For all vessels over 2,001 tons and upwards ..	2d. "

Twenty per cent. reduction on Calliope Dock rates is allowed when two or three vessels can arrange to dock on the same tide, and remain in dock the same number of hours; but such reduction is not allowed if any of the Auckland Harbour Board's vessels are docked at the same time as another vessel.

For shores cut in docking or hanging the vessel, there is to be paid, according to injury done, such amount as may be fixed by the Dockmaster.

During the year 1902, 79 vessels of various descriptions, with a total of 26,089 tons, made use of the Auckland Graving Dock, occupying it in all 216 days, for repairs or painting.

In Calliope Dock 19 vessels were docked, with an aggregate tonnage of 44,174, and occupying the dock for 107 days.

Dock dues for the year amounted to £2,907 9s. 5d.

Under arrangement with the Admiralty, a complete plant of the most efficient and modern machinery has been provided at Calliope Dock-yard. The workshops are now erected, and all the machinery is placed in position, with the exception of the shear-legs. This plant includes 80-ton shear-legs complete, trolly to carry 80 tons and rails, 10-ton steam crane at side of dock, engines, boilers, overhead travellers; planing, shaping, and slotting machines; radial drills, vertical drills, band-saws for iron, punching and shearing machines, plate-bending rolls; 24 in.-centre gantry lathe, 70 ft. bed; 9 in. and 12 in. gantry lathes, milling-machines, emery-grinders, screwing-machines, ditto for pipes, horizontal boring-machines, Root's blower, smiths' forges (six), coppersmith's forge, levelling-slabs, steam-hammers, lead-furnace, wall-cranes, zinc-bath, plate-furnace, jib-crane for foundry, circular-saw bench, band-saw for wood, lathe for wood, general joiner, carpenters' benches (four), kiln for steaming boards, Fox's trimmer, cupola to melt 5 tons of metal, countersinking machine, pipe-bending machine, tools of various descriptions, moulders' bins, force-pumps for testing pipes, vice-benches, electric-light engines, dynamos (two), &c.; and all other appliances and machinery required to render the plant adequate to repair any of His Majesty's ships upon the station, or any merchant vessel visiting the port. The dock and machinery will be available for use, when not required for His Majesty's vessels, in effecting repairs to any merchant vessel requiring same. Electric lights have been provided for workshops, dock, and dockyard. The dockyard is now connected by telephone with the central exchange. An abundant supply of the purest fresh water is available at Calliope Dock and Calliope Wharf; and a most complete establishment of up-to-date machinery and appliances has been provided.

Wellington Patent Slip.

The Port of Wellington has no dock; but there is a well-equipped patent slip at Evans Bay, on which vessels of 2,000 tons can be safely hauled up. This slip is the property of a private company, and is in no way connected with the Harbour Board. It is 1,070ft. long, with a cradle 260ft. in length. There is a depth of 32ft. at high water at the outer end of the slip. A dolphin and buoys are laid down for swinging ships in Evans Bay.

The company has convenient workshops, which contain machinery necessary for effecting all ordinary repairs to vessels using the slip.

During the year ending 31st March, 1902, ninety-six vessels of various sizes, of an aggregate of 50,037 tons, were taken up on the slip for repairs, cleaning, painting, &c. The charges for taking

vessels on the slip and launching them are 1s. per ton on the gross tonnage for the first full twenty-four hours, and 6d. per ton per day afterwards, unless by special agreement.

Lyttelton Dock and Patent Slip.

The Graving-dock at Lyttelton, which is the property of the Harbour Board, is capable of docking men-of-war, or almost all of the large ocean steamers now running to the colony. Its general dimensions are: Length over all, 503ft.; length on floor, 450ft.; length inside caisson at a height of 4 ft. above the floor, 462 ft.; breadth over all, 82ft.; breadth on floor, 46ft.; breadth at entrance, 62ft.; breadth where ship's bilge would be, on 6ft. blocks, 55ft.; depth of water on sill at high-water springs, 23ft.

The scale of charges for the use of the dock and pumping machinery are as follow:—

	£	s.	d.
For all vessels up to 300 tons, for four days or less ..	20	0	0
" 301 to 400 tons, " ..	22	10	0
" 401 to 500 tons, " ..	25	0	0
" 501 to 600 tons, " ..	27	10	0
" 601 to 700 tons, " ..	30	0	0
" 701 to 800 tons, " ..	32	10	0
" 801 to 900 tons, " ..	35	0	0
" 901 to 1,000 tons, " ..	37	10	0
" 1,001 to 1,100 tons, " ..	40	0	0
" 1,101 to 1,200 tons, " ..	45	0	0
" 1,201 tons and upwards, " ..	50	0	0

After the fourth day in dock, the following rates are charged:—

For all vessels up to 500 tons	4d. per ton per day.
For all vessels of 501 tons to 1,000 tons ..	3d. "
For all vessels over 1,001 tons up to 2,000 tons ..	2⅝d. "
" 2,001 tons up to 3,000 tons ..	2½d. "
" 3,001 tons up to 4,000 tons ..	2¼ "
" 4,001 tons up to 5,000 tons ..	2d. "

Twenty per cent. reduction on the above rates is allowed when two or three vessels can arrange to dock on the same tide and remain in dock the same number of hours. Two vessels of 1,000 tons each can be docked at the same time. The 20-per-cent. rebate is not allowed if any of the Lyttelton Harbour Board's vessels are docked at the same time as another vessel. The twenty-four hours constituting the first day of docking commences from the time of the dock being pumped out.

Any vessel belonging to H.M. Navy or any colonial Government, or any commissioned ship belonging to any foreign nation, is admitted into the graving dock without payment of the usual dock dues, but is charged only such sum as is necessary for the reimbursement of actual expenditure of stores, wages, and materials.

There are electric lights, one on each side of the graving-dock; and there is a workshop alongside the dock, and several other engineering works within a short distance of it, where repairs and heavy foundry-work can be done.

The graving dock and machinery cost £105,000. The interest and sinking fund on that sum, at 6½ per cent., amounts to

£6,825 per annum. Since its construction, the dock dues for the twenty years, ended 31st December, 1902, amounted to £20,388 4s. 10d., and the working expenses to £12,249 13s. 5d., leaving a credit balance for twenty years, ended 31st December, 1902, of £8,138 11s. 5d.

During the year 1902 twenty-three vessels were docked, and the dock dues amounted to £1,266 19s. 3d. For the twenty years, ending 1902, 402 vessels were docked.

Patent Slip, Lyttelton.

Alongside the graving dock is a patent slip, with a cradle 150ft. in length, suitable for vessels of 300 tons. It belongs to the Harbour Board.

The following is the scale of charges:—

Up to 75 tons gross register, £4 for five days, and 10s. per day after the fifth day.
Over 75 tons and up to 150 tons gross register, £6 for five days, and 15s. per day after fifth day.
Over 150 tons and up to 250 tons gross register, £8 for five days, and 20s. per day after fifth day.
Over 250 tons gross register, £10 for five days, and 20s. per day after fifth day.
A day to mean between sunrise and sunset.
The above rates cover the cost of all labour connected with hauling up and launching (the crew of the vessel to give their assistance as may be required), and the cost of blocking a vessel and shifting the blocks after hauling up.

Otago Graving Dock.

The dock at Port Chalmers is vested in the Otago Dock Trust, a body entirely distinct from the Otago Harbour Board. Vessels of large size can be taken in the Otago Dock, as the following measurements will show:—

Length over all	335 feet.
Length on the floor	328 "
Breadth over all	68 "
Breadth on floor	41 "
Breadth where ship's bilge would be	42 "
Breadth at dock gates	50 "
Depth of water on sill at high-water (ordinary spring tides)	17½ "

Connected with the Otago Dock are a large machine-shop, steam-hammer, and forge, with all the appliances necessary for performing any work that may be required by vessels visiting the port. An 80-ton shear-legs has also been erected for heavy lifts.

There is also a patent slip, used for taking up small vessels.

All vessels using the Otago Graving Dock are liable to dock dues, according to the following scale (unless under special contract), revised since the beginning of 1896:—

	£	s.	d.
Vessels under 200 tons, for the first three days, or part of three days	25	0	0
Vessels of 200 tons, and under 800 tons	35	0	0
" 800 tons and upwards	50	0	0

And for every day, or part of a day, after the first three days:—

Vessels under 300 tons				..	8d. per register ton per day.
"	300 "	and under	400 tons		7¾d. "
"	400 "	"	500 "		7½d. "
"	500 "	"	600 "		7¼d. "
"	600 "	"	700 "		7d. "
"	700 "	"	800 "		6¾d. "
"	800 "	"	900 "		6½d. "
"	900 "	"	1,000 "		6¼d. "
"	1,000 tons and upwards				6d. "

During the twelve months ended 31st December, 1902, the dock was in use 221 working-days. The number of vessels docked was fifty-two, having a total registered tonnage of 48,111.

HARBOURS.

Pilotage, Port Charges, etc.

Pilotage, port charges, berthage charges, &c., at fourteen of the principal harbours in New Zealand, as on the 1st January, 1903 (compiled by Mr. C. Hood Williams, Secretary to the Lyttelton Harbour Board):—

Auckland.

Pilotage (not compulsory): Sailing-vessels, inwards and outwards, 3d. per ton each way.

Steamers, inwards and outwards, 2d. per ton each way when services of pilot are taken.

Pilotage includes the removal fee to or from the berth at 1d. per ton.

Port charges: 3d. per ton half-yearly (on all vessels over 15 tons) in one payment.

Harbourmaster's fees: 1d. per ton. Vessels paying pilotage are exempt.

Exemption berthage certificates are given to competent masters in the coastal and intercolonial trades, but not to those in foreign trade.

Berthage: Every person who shall use any wharf with any vessel shall pay for the use thereof—Ferry steamers, 10s. to £1 10s. per month; other vessels under 20 tons, 6d. and 1s. per day, not exceeding 10s. per quarter. For every vessel not included in the above, ¼d. per ton per day. Outside berths, ⅛d. per ton per day.

Gisborne.

Pilotage (not compulsory): Sailing-vessels over 100 tons, first 100 tons, 6d. per ton; every ton over 100 tons, 2d. per ton. Into and out of Turanganui River: Sailing-vessels, 3d. per ton; sailing-vessels towed, 2d. per ton; steamers, 2d. per ton.

Port charges: Steamers, sailing-vessels, or boats plying within the harbour or engaged in coasting only, 3d. per ton quarterly; steamers sailing-vessels, or boats plying within the harbour and not engaged in coasting, only on arrival (not to exceed 10d. per ton in any half-year), 1d. per ton; steamers or sailing-vessels from beyond the Australian States, on arrival, 4d. per ton.

Harbourmaster's fees: Free.

Berthage alongside the wharves: Per day or part, under 50 tons, 5s.; over 50 tons and up to 75 tons, 7s. 6d.; over 75 tons up to 100 tons, 10s.; for every additional 50 tons or fraction thereof, 2s. 6d. Vessels discharging outside of bars to pay half foregoing dues. Steamers to pay double rates as per tonnage; and in all cases sailing-vessels to make way for steamers.

NAPIER.

Pilotage (not compulsory): Into Inner Harbour—Sailing-vessels, 4d. per ton; steamers, 3d. per ton. To roadstead—First 100 tons, sailing-vessels, 6d. per ton; steamers, 3d. per ton. Every ton over 100 tons—Sailing-vessels, 2d. per ton; steamers, 1d. per ton. Into Breakwater Harbour—First 100 tons, sailing vessels, 6d. per ton; steamers, 3d. per ton. Every ton over 100 tons—Sailing-vessels, 2d. per ton; steamers, 1d. per ton. Outward pilotage, half rates.

Port charges: 6d. per ton quarterly in advance, vessels plying within port or engaged in coasting only; 2d. per ton on arrival of vessels not plying within port or not solely employed in coasting, but not to exceed 1s. per ton in any half-year. Ocean-going vessels (not being "colonial trading" or coasting vessels) returning to port within one month from date of first arrival are exempt from port charges for second or subsequent arrivals within one calendar month.

Harbourmaster's fees: 5s. per vessel of less than 60 tons. Steamers under 60 tons and licensed as lighters are exempt. 1d. per ton sailing-vessels 60 tons and upwards; 10s. per vessel steamers of 60 tons and under 120 tons; 1d. per ton steamers of 120 tons and upwards. Vessels paying for pilotage service inwards do not pay Harbourmaster's fees.

Berthage: Breakwater Harbour wharves—3d. per ton on cargo landed, shipped, or transhipped; 1s. each horse or large cattle shipped or transhipped; ½d. each sheep or small animal shipped or transhipped. Other wharves—10s. per vessel of 60 tons; £1 per vessel over 60 tons to 120 tons; 2d. per ton vessels over 120 tons. Half rates only charged where vessels entering the Inner Harbour pay for pilotage services. Vessels licensed as lighters or towboats shall, whilst actually employed at lighterage work, only pay one-third of the foregoing charges upon each and every trip.

Hawsers and moorings: Vessels at wharf in Breakwater Harbour—¼d. per ton per day, or part of a day, on registered tonnage. Vessels moored to buoys within Breakwater Harbour, ½d. per ton per day or part of a day.

Fenders: Vessels at wharves in Breakwater Harbour—5s. per day, vessels under 500 tons; 7s. per day, vessels of 500 tons and under 1,000 tons; 10s. per day vessels of 1,000 tons and under 1,500 tons; 15s. per day, vessels of 1,500 tons and under 2,000 tons; £1 per day, vessels of 2,000 tons; and so on, in proportion.

NEW PLYMOUTH.]

Pilotage (compulsory): Charged both inwards and outwards, intercolonial or coasting—Sailing-vessels, 3d. per ton; steamers, 1½d. per ton; foreign sailing-vessel or steamer, ½d. per ton.

Port charges: Intercolonial, 4d. per ton, payable half-yearly; foreign, ½d. per ton on arrival in roadstead.

Harbourmaster's fees: Free.

Berthage rate: 3½d. per ton on all cargo landed, shipped, or transhipped outwards; on registered tonnage also ½d. per ton.

Warps: 1d. per ton register for first 100 tons; ½d. per ton for excess.

Fenders: 1s. per day or part of day.

Water (minimum 3s.): 5s. per 1,000 gallons.

WANGANUI.

Pilotage: All vessels when piloted by signals from the staff only, 1d. per ton register. River pilotage, to be charged for any assistance rendered by the pilot or any of his crew inside the bar, 2d. per ton. When a pilot boards and conducts a vessel outside the bar, 3d. per ton. Steamers engaged in tendering ocean steamers at anchor in the roadstead charged half pilotage rates.

Port charges: Nil.

Harbourmaster's fees: Free.

Berthage: For every steamer using any wharf, being berthed alongside, and whether discharging or loading cargo or not, 2d. per ton on gross register for first day of eight working hours, and 1d. for every succeeding day of eight working hours. For every sailing-vessel the charge to be 2d. for first day of eight working hours, and ½d. for every succeeding day of eight working hours, not exceeding five days. For every vessel occupying a berth outside another vessel, and loading or discharging cargo, ¼d. per ton on gross register per day of eight working hours whilst loading or discharging. Ships' dues on vessels detained in port by stress of weather will not be charged after the third day.

WELLINGTON.

Pilotage (optional): Sailing-vessels inwards, 4d. per ton; sailing-vessels outwards, 3d. per ton; steamers inwards, 3d. per ton; steamers outwards, 2d. per ton. Pilotage includes the removal fee to or from the berth at 1d. per ton.

Port charges: 2d. per ton on arrival; not exceeding 6d. in any half-year. Half-yearly days, 1st January and July. Steamers arriving for coal, stores, water, or for receiving or landing mails or passengers and their luggage, which do not come to any wharf or receive or discharge cargo within the port, are exempt from port charges.

Harbourmaster's or berthing fee on vessels of 120 tons and upwards, 1d. per ton; under 120 tons, 10s. Vessels paying pilotage are exempt. Exemption berthage certificates are given to competent masters in the coastal and inter-colonial trades, but not to those in foreign trade.

Berthage: None, unless vessels delay discharging or loading for an undue time.

NELSON.

Pilotage (compulsory): Steamers, inwards and outwards, 1d. per registered ton. Sailing-vessels, inwards and outwards, 3d. per ton. Minimum pilotage each way (in all cases), £1.

Port charges: For vessels not employing the pilot, to pay the following, upon first arrival, half-yearly: Vessels over 100 tons register, 1s. per ton; vessels under 100 tons register, 6d. per ton.

Harbour lights: Vessels not employing the pilot, over 100 tons register, 1d. per ton; under 100 tons register, ½d. per ton, on arrival.

Harbourmaster's fees: 120 tons and upwards, 1d. per ton; less than 120 tons, 10s. for each removal of any steamer or sailing vessel within the harbour.

Berthage, fenders, and warps: Nil.

WESTPORT.

Pilotage (not compulsory). Signal-station. Four pilots authorised: Vessels up to 120 tons register, 1d. per ton; over 120 tons, 2d. per ton inwards and outwards; minimum charge, 5s.; maximum charge, £10.

Port charges: Receiving and discharging ships' ballast, 1s. per ton; minimum charge, 20s.; 1d. per ton for use of shoot.

Harbourmaster's fees: Free.

Berthage: Use of wharf, for every vessel up to 1,400 tons lying at wharf, 1d. per ton net register per trip; for every vessel over 1,400 tons, 2d. per ton net register per trip; minimum charge, 5s. No vessel to be charged for more than one trip in any one week.

GREYMOUTH.

Pilotage: Free (signal-station).

Port charges: Discharging ships' ballast, 6d. per ton

Harbourmaster's fees: Free.

Berthage: Use of wharf, 6d. per ton net register per trip. Vessels in ballast for coal or timber, 1d. per ton net register for the first four days; maximum, £5 10s.; minimum, 5s.

LYTTELTON.

Pilotage (compulsory): Pilotage, inwards and outwards, sailing-vessels 3½d. per ton; steamers, 2½d. per ton. Free on second call on same voyage.

Port charges: 2d. per ton, quarterly in advance, for vessels of 100 tons and upwards plying within the port or employed in coasting only, not to exceed 6d. per ton in any half-year; 2d. per ton for vessels of 100 tons and upwards not plying within the port or not solely employed in coasting, not to exceed 6d. per ton in any half-year. For exemptions from pilotage and harbour fees, see sections 132, 133, and 134 of "The Harbours Act, 1878."

Harbourmaster's fees: Free.

Berthing charges: None.

Warps (21 in. coir hawsers): £1 per warp for use during a vessel's stay in port, not exceeding six months.

Fenders (soft wood): 10s. for first day, and 5s. er day after. 10s. for use of each hardwood fender.

TIMARU.

Pilotage (compulsory): Sailing-vessels, 3d. per ton inwards and outwards; when tug used, 2d. per ton; steamers, 2d. per ton inwards and outwards. Foreign and intercolonial steamers under 3,500 cargo tons, working 800 tons or less, only one pilotage fee; 3,500 tons or over, working 1,000 tons cargo or less, one pilotage fee only.

Port charges: Coasters, 1½d. per ton each trip; sailing-vessels, not coasters, 3d. per ton each trip; steam-vessels, not coasters, 6d. per ton on cargo worked; in all cases not to exceed 1s. 3d. per ton in any half-year. Intercolonial steamers coming coastwise 1½d. per ton register, or 6d. per ton on cargo landed and shipped, whichever rate may be the lesser.

Harbourmaster's fees: 1d. per ton each service; vessels less than 120 tons, 10s.; steamers of 1,000 tons or over, which have loaded wholly in New Zealand or Australian ports, working 500 tons of cargo or less, only one harbourmaster's fee. This fee is charged to all vessels or steamers not paying pilotage.

Berthage: 3d. per ton on all cargo landed or shipped.

Hawsers and moorings: Vessels at wharves, ½d. per ton register for first seven days; subsequent days, ¼d. per ton. Vessels at buoys, under 800 tons register, ½d. per ton; over 800 tons, $\frac{1}{16}$d. per ton.

Fenders: Sailing-vessels under 500 tons register, 2s. per day; under 1,000 tons, 3s. per day; over 1,000 tons, 4s. per day. Steamers under 1,000 tons register, 4s. per day; under 1,500 tons, 10s. per day; under 2,000 tons, 15s. per day; over 2,000 tons, £1 per day.

OAMARU.

Tonnage rate: On cargo, inwards or outwards—Coal, merchandise, stone, produce, and timber, 8d. per ton; wool, 2s. per ton; frozen sheep, 1d. per carcase; frozen lamb, 1d. per carcase; rabbits and hares, 3s. per ton, gross weight; all other frozen goods 3s. per ton, gross dead weight; live-stock, 1s. 8d. per ton. Note.—Collected in the same manner as berthage dues have been collected.

Warps: ½d. per ton per day for seven days; ¼d. per ton per day thereafter.

OTAGO.

Pilotage (compulsory): Inwards and outwards, sailing-vesssls without tug, 6d. per ton; with tug, 4d. per ton; steamers, 4d. per ton. Foreign steamers calling twice on one voyage only charged once. All vessels holding exemption certificates, one annual pilotage. For every vessel under steam carrying an exempt pilot and employing a Board's pilot the charge shall be ½d. per ton for the Upper Harbour.

Port charges: 6d. per ton half-yearly, all vessels.

Harbourmaster's fees: Vessels less than 120 tons, 10s.; over 120 tons, 1d. per ton.

Berthage: Vessels trading within the port—10 tons, 5s. per quarter; 25 tons, 10s. per quarter; 50 tons, 15s. per quarter; 100 tons, £1 per quarter. Vessels trading beyond the port—Sailing-vessels ¼d. per ton (maximum, eighteen days, £10); steam-vessels, ½d. per ton per day. Vessels laid up for less than a month, one-half the above rates; over a month, ½d. per ton per month.

Towage: When assistance is given to steam-vessels under steam, one-fourth usual towage, not exceeding £5 for Upper Harbour, and £7 for Lower Harbour.

NOTE.—Foreign steamers taking or discharging not more than 50 tons general cargo and 100 tons frozen produce, pay £50 for port charges, pilotage, and harbourmaster's fees; also maximum charges on any one vessel, £200.

BLUFF.

Pilotage (compulsory): Steamers, inwards and outwards, 2½d. per registered ton; sailing-vessels, 4½d. inwards and outwards if tug not employed; 2½d. per registered ton inwards and outwards if tug employed. Sailing-vessels in ballast, 2½d. per registered ton inwards and outwards. Steamers in and out, 5d. per registered ton, payable yearly; sailing-vessels, in and out, 9d. per registered ton, payable yearly.

Port charges: On all vessels, per trip, 2d. per registered ton, or in one sum, half-yearly from date of entry, 6d. per registered ton.

Harbourmaster's fees: Free.

Berthage: Steamers, 2d. per ton net register for the first day, and 1d. per ton per week or part of a week thereafter. Sailing-vessels and hulks of over 50 tons register, 1d. per ton net register per week for the first four weeks, and ¼d. per ton per week thereafter.

Towage assistance to steamers using their own motive power: Over 3,000 tons, £5; over 2,000 tons, £4; under 2,000 tons, £3.

Maximum charge for berthage dues, pilotage, and port charges, £180 in any one visit.

Steamers calling more than once on same voyage only charged one inward and outward pilotage.

WHARFAGE RATES.

Wharfage rates at fourteen of the principal harbours in New Zealand, as on 1st January, 1903 (compiled by Mr. C. Hood Williams, Secretary to the Lyttelton Harbour Board):—

AUCKLAND.

General Merchandise.—2s. per ton imports; 1s. per ton exports.
Transhipments: Half-rates when declared before landing, or 2s. 6d. per ton, including labour and seven days' storage.

Grain and Agricultural Produce.—1s. 6d. per ton landed; 1s. per ton shipped.
Transhipments: Half-rates when declared before landing, or 2s. 6d. per ton, including labour and seven days' storage.

Frozen Meat, Butter, &c.—1s. 6d. per ton landed; 1s. per ton shipped.
Transhipments: Half-rates when declared, or 2s. 6d. per ton, including seven days' storage and labour.

Wool.—6d. per bale, shipped or landed.
Transhipments: If landed, dumped, and re-shipped, 3d. per bale.

Coal.—1s. 3d. per ton landed; 6d. per ton shipped.
Transhipments: Shipped or discharged over side for steamer's use, free.

Timber.—Sawn, 2s. per 1,000 ft. landed; 1s. per 1,000 ft. shipped. Baulk or round (less 12½ per cent.), 1s. per 1,000 ft. landed, 6d. per 1,000 ft. shipped.

Passengers' luggage under half ton, goods carried by hand by passengers, and single packages under 5 ft. measurement, free.

GISBORNE.

General Merchandise.—Imports, 5s. to 6d.; exports, 2s. 6d. to 6d. By measurement, from 40 cubic feet to 4 cubic feet; same for weight. Ale, beer, and porter, per gallon—Import, 1½d., export, ½d.; spirits and wine, per ton measurement, 7s. 6d. No export charges on goods that have paid inward wharfage.

Transhipments: Free.

Grain and Agricultural Produce.—Grain—Imports, 5s.; exports, 1s. Grass-seed—Imports, 5s.; exports, 2s. Potatoes—Imports, 5s.; exports, 2s. 6d. (12 sacks).

Transhipments: Free.

Frozen Meat, Butter, &c.—Sheep, 2d. per carcase; lambs, 1d. per carcase; haunches, legs, &c., 2s. 6d. per ton.

Transhipments: Free.

Wool.—1s. 3d. per bale, export.

Transhipments: 3d. per bale if landed and reshipped. Free if transhipped into vessel.

Coal.—2s. per ton.

Transhipments: Coal for engines and freezing-ships, free.

Timber.—Sawn, 4s. per 1,000 ft.; bulk, 1s. per 1,000 ft., imports; 1s., and 6d., per 1,000 ft., exports.

Transhipments: Free.

NAPIER.

General Merchandise.—2s. 6d. per ton imports, 1s. 3d. per ton exports, according to measurement or weight. If labour supplied, add on 9d. imports, and 3d. exports. Ballast, inwards, 1s. per ton; outwards, 1s. per ton. Empties, half rates.

Transhipments: Quarter import rates, Outer Harbour; half import rates, Inner or Breakwater Harbours.

Grain and Agricultural Produce.—2s. 6d. imports; 1s. 3d. exports, according to measurement or weight. If labour supplied, add on 9d. imports, and 3d. exports.

Transhipments: Quarter import rates, Outer Harbour; half import rates, Inner or Breakwater Harbours.

Frozen Meat, Butter, &c.—Imports free; exports 2s. 6d. per ton. Tallow and pelts, imports free; exports 2s. 6d. per ton.

Transhipments: Quarter import rates, Outer Harbour; half import rates Inner or Breakwater Harbours.

Wool.—1s. per bale, exports only. Imports, free.

Transhipments: 3d. over side; 6d. per bale if landed for transhipment.

Coal.—2s. imports; 1s. exports.

Transhipments: Quarter rates, Outer Harbour; half rates, Inner or Breakwater Harbours. Coal for engines and freezing-ships, Outer Harbour, free, if declared so.

Timber.—3s. 4d. per 1,000 ft., imports; 1s. 3d. per 1,000 ft. exports.

Transhipments: Half rates, Inner or Breakwater Harbours; quarter rates, Outer Harbour.

NOTE.—Goods other than wool and flax landed on a wharf for transhipment to a vessel lying at another berth, charged inward wharfage only when declared at time of entry

NEW PLYMOUTH.

General Merchandise.—2s. per ton.

Transhipments: 1s. 6d. per ton.

Grain and Agricultural Produce.—2s. per ton; grass-seed, 2s. (20 sacks).

Transhipments: 1s. 6d. per ton.

Frozen Meat, Butter, &c.—2s. per ton.

Transhipments: 1s. 6d. per ton.

Wool.—6d. per bale; five bales of 4 cwt., 2s. per ton; three bales of over 4 cwt. 2s. per ton.

Transhipments: Three-quarter rates.

Coal.—2s. per ton; brown coal, 1s. 9d., with labour.
Transhipments: Three-quarter rates, with labour.
Timber.—480 ft. per ton, 2s.; hardwood, 320 ft. per ton (rough or sawn), 2s., with labour.
Transhipments: Three-quarter rates.

WANGANUI.

General Merchandise.—Imports, 3s. per ton; exports, 2s. per ton.
Transhipments: Half-rates.
Grain and Agricultural Produce.—Imports, 3s. per ton; exports, 2s. per ton. Potatoes, export, 1s. per ton.
Transhipments: Half-rates.
Frozen Meat, Butter, &c.—Sheep, ½d. per carcase; lambs, ½d. per carcase; legs, shoulders, and loins calculated at so many to a carcase, according to freight.
Wool.—6d. per bale.
Transhipments: Half rates.
Coal.—1s. per ton. Coal for ship's use, outward, 6d. per ton.
Transhipments: Half-rates.
Timber.—6d. per 100 ft.; for shipment, 2d.; white pine, 1d.
Transhipments: Half rates.

WELLINGTON.

General Merchandise.—2s per ton inwards, including labour and one night's storage. Inward cargo landed after noon on Friday is stored free till noon on following Monday; landed after noon on Saturday is stored free till 5 p.m. on the following Tuesday. 1s. per ton outwards, including labour. Railway wharfage—1s. inwards; 6d. outwards, without labour.
Transhipments: 2s. 6d. per ton, including labour and one week's storage. Over side of vessel lying at wharf, 6d. per ton.
Grain and Agricultural Produce.—2s. per ton inwards, including labour and one night's storage; 1s. per ton outwards, including labour. Railway wharfage—1s. inwards; 6d. outwards, without labour.
Transhipments: 2s. per ton, including labour and seven days' storage. Over side of vessel at wharf, 6d. per ton.
Frozen Meat, Butter, &c.—1s. inwards; 1s. outwards, without labour. Railway wharfage—1s. inwards; 6d. outwards, without labour.
Transhipments: Meat, 1s. 3d. per ton, without labour; butter, 2s. 6d. per ton, including labour and storage. Meat, butter, &c., over side of vessel at wharf, 6d. per ton.
Wool.—4d. per bale at Railway Wharf, without labour; 6d. per bale at other wharves, including labour.
Transhipments: 6d. per bale, including labour, and 3d. additional if stored. Over side of vessel to vessel at wharf, 3d. per bale.
Coal.—1s. per ton imports; 6d. per ton exports, without labour. Railway wharfage—1s. per ton inwards; 6d. per ton outwards, without labour.
Transhipments: Across wharf for steamer's use, free. From vessel or hulk to vessel at wharf, free.
Timber.—2d. per 100 ft. inwards; 1½d. per 100 ft. outwards, without labour. If labour supplied, 2d. per 100 ft. added inwards, and 1½d. outwards. Railway wharfage—2d. inwards; 1½d. outwards, without labour.
Transhipments: 2s. 6d. per ton, including seven days' storage and labour; and 6d. over vessel's side into another.
Harbour Improvement Rate.—The charge of 3d. per ton shall be made to and payable by ships to the Board, as a Harbour Improvement Rate on all goods landed on the wharves or landing-places under the control of the Board, except on coal and on ballast, and except on such goods as are the products of the Colony of New Zealand and are landed for the purpose of transhipment to vessels to be carried out of the colony: Provided that for

the purposes of this by-law the following measurements shall be taken: Empties, half tonnage; wool, five bales to the ton; great cattle, each one ton; small cattle, twelve to the ton; timber, 500 ft. superficial measurement to the ton; bricks, slates, and tiles, 500 to the ton; carts and carriages, each two tons; loose hides, twenty-five to the ton.

NELSON.

General Merchandise.—2s. per ton, imports and exports, with labour.
Transhipments: Free, when not landed on wharf; 2s. 6d. if landed.
Grain and Agricultural Produce.—1s. 6d. per ton, imports and exports, with labour.
Transhipments: Free, when not landed on wharf; 2s. 6d. if landed.
Frozen Meat, Butter, &c.—None shipped.
Transhipments: Free, when not landed on wharf; half rates if landed.
Wool.—Exports, 1s. per bale; imports free.
Transhipments: Free, when not landed on wharf; half rates if landed.
Coal.—1s. per ton imports; 2s. with labour. Free exports.
Transhipments: 2s. 6d. per ton, with labour. Free, when not landed on wharf.
Timber.—1d. per 100 ft. super., import; 1d. per 100 ft. super., export; 2s. per ton by measurement, with labour.
Transhipments: Free, when not landed on wharf; half rates if landed on wharf. Re-shipments, 2s. 6d. per ton.

WESTPORT.

General Merchandise.—2s. per ton.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.
Grain and Agricultural Produce.—2s. per ton.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.
Frozen Meat, Butter, &c.—2s. per ton.
Transhipments: 2s. 6d. per ton, including labour and one week's storage.
Wool.—6d. per bale.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.
Coal.—6d. per ton.
Timber.—2d. per 100 ft. If for export and carried by rail, free.

GREYMOUTH.

General Merchandise.—3s. per ton. This charge includes 1s. a ton for receiving and delivering.
Transhipments; 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.
rain and Agricultural Produce.—3s. per ton. This charge includes 1s. a ton for receiving and delivering.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.
Frozen Meat, Butter, &c.—3s. per ton. This charge includes 1s. a ton for receiving and delivering.
Transhipments: 2s. 6d. per ton, including labour and one week's storage.
Wool.—6d. per bale.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.
Coal.—6d. per ton inwards; 3d. outwards.
Timber.—2d. per 100 ft. If for export and carried by rail, free.

LYTTELTON.

General Merchandise.—1s. 6d. per ton.
Transhipments: Free, whether landed on wharf or otherwise.

Grain and Agricultural Produce.—6d. per ton.
Transhipments: Free.
Frozen Meat, Butter, &c.—6d. per ton.
Transhipments: Free, whether landed on wharf or otherwise.
Wool.—6d. per bale.
Transhipments: Free.
Coal.—6d. per ton.
Transhipments: Free, whether landed on wharf or otherwise.
Timber.—3d. per 100 ft.
Transhipments: Free.
N.B.—All re-shipments of goods from Lyttelton under declaration, free.

TIMARU.

General Merchandise.—2s. per ton.
Transhipments: Half rates.
Grain and Agricultural Produce.—1s. 6d. per ton.
Transhipments: Half rates.
Frozen Meat.—½d. per carcase.
Transhipments: Half rates.
Wool.—1s. per bale.
Transhipments: Half rates.
Coal.—2s. per ton.
Transhipments: Half rates. For bunkering purposes, free.
Timber.—4d. per 100 ft.
Transhipments: Half rates.

OAMARU.

General Merchandise.—2s. per ton.
Transhipments: Free.
Grain and Agricultural Produce.—2s. per ton.
Transhipments: Free.
Frozen Meat, Butter, &c.—½d. per sheep. Butter, as merchandise, 2s. per ton. Other frozen goods, 2s. per ton
Transhipments: Free.
Wool.—6d. per bale.
Transhipments: Free.
Coal.—2s. per ton.
Transhipments: Free.
Timber.—5d. and 7d. per 100 ft. Fencing posts and rails, 4s. per 100. Palings, 7d. per 100.
Transhipments: Free.
Stone.—½d. per foot.
Live Cattle and Horses.—2s. 6d. each; yearlings, half rates. Sheep, 2d. each; pigs, 4d. each.

DUNEDIN.

General Merchandise.—3s., 4s., and 5s. per ton, imports; 9d., 2s., and 3s. per ton, exports. (Classified.) Manufactured articles and articles which have paid an import duty, free.
Transhipments: 2s. per ton.
Grain and Agricultural Produce.—1s. per ton, imports; 1s. 3d. per ton by weight, exports; bran and pollard, exports, free.
Transhipments: 1s. per ton.
Frozen Meat, Butter, &c.—3s. per ton, exports; butter, imports, 4s. per ton; frozen meat, imports, 5s. per ton; sheep and lambs, 1d. per carcase, exports.
Transhipments: 2s. per ton.
Wool.—Exports, 3s. per ton by measurement; 4s. per ton, imports (three bales to ton).
Transhipments: 2s. per ton by measurement.

Coal.—3s. per ton, imports: 9d. per ton, exports.
Transhipments: 2s. per ton.
Timber.—6d. and 3d. per 100 superficial feet, imports; exports, free.
Transhipments: 2s. per ton by measurement. Notice of transhipment must be given within twenty-four hours after ship's arrival.

BLUFF.

General Merchandise.—1s. 10d. per ton, imports and exports.
Transhipments: Free, when not landed on wharf; half rates if landed.
Grain and Agricultural Produce.—11d. per ton, imports and exports.
Transhipments: Free, when not landed on wharf; half rates if landed.
Frozen Meat, Butter, &c.—11d. per ton, exports; cheese, 1s. per ton.
Transhipments: Free, when not landed on wharf; half rates if landed.
Wool.—Exports, 9d. per bale; imports free.
Transhipments: Free, when not landed on wharf; half rates if landed.
Coal.—1s. 6d. per ton, imports; free exports.
Transhipments: 1s. 6d. per ton when landed ex hulk; free when not landed on wharf.
Timber.—1s. per 1,000 ft. super., import; 1s. per 1,000 ft. super., export.
Transhipments: Free, when not landed on wharf; half rates if landed on wharf.

LIGHTHOUSES.

THE coasts of New Zealand are, considering their extent, fairly well lighted, but there are many places where lights are still required. Additions to the existing lights are made from time to time as funds are available.

There are twenty-nine coastal lights—eight of the first order, fifteen of the second, three of the third, and three of smaller orders, and a second order light is about to be erected on Kahurangi Point, on the west coast of the Middle Island, the tower for which is now being built.

There has been no special difficulty in the erection of lighthouses in New Zealand, apart from the trouble caused by indifferent landings. There are no lighthouses built in the sea, such as the well-known Eddystone or Bell Rock. That on The Brothers is the only one which it is considered necessary to keep as a rock-station: that is, the keepers are relieved from time to time, three being always at the station and one on shore.

The cost of the erection of the lighthouses is given by the Marine Department as about £181,600 (the Ponui Passage Lighthouse, having been built by the Provincial Government of Auckland, the cost is not given). The annual consumption of oil is about 21,700 gallons; and the cost of maintenance, irrespective of the cost of maintaining the lighthouse steamer, is about £16,100 a year. This amount includes cost of new houses at Farewell Spit, and sundry repairs at other stations.

Besides the coastal lighthouses, there are harbour-lights at most of the ports of the colony for the guidance of vessels into and out of the ports.

The following table shows the names of the lighthouses, indicating also their situation, the order of apparatus, description,

period (in seconds) and colour of the lights, and of what material the respective towers are built:—

Name of Light-house.	Order of Apparatus.	Description.	Period of Revolving Light.	Colour of Light.	Tower built of.
	Dioptric.		Seconds.		
Cape Maria van Diemen	1st order ..	Revolving	60	White	Timber.
	..	Fixed ..	..	Red, to show over Columbia Reef	
Moko Hinou ..	1st „ ..	Flashing	10	White	Stone.
Tiri-Tiri (Auckland)	2nd „ ..	Fixed ..	..	White, with red arc over Flat Rock	Iron.
Ponui Passage..	5th „ ..	„ ..	..	White and red ..	Timber
Cuvier Island ..	1st „ ..	Revolving	30	White	Iron.
East Cape ..	2nd „ ..	„	10	„	„
Portland Island	2nd „ ..	„	30	„ ..	Timber.
	..	Fixed ..	..	Red, to show over Bull Rock	
Cape Palliser ..	2nd „ ..	Flashing	Twice every half-minute, with three seconds intervals between flashes	White	Iron.
Pencarrow Head	2nd „ ..	Fixed ..	..	White	Iron.
Cape Egmont ..	2nd „ ..	„ ..	..	„	„
Manukau Head	3rd „ ..	„ ..	..	„	Timber
Kaipara Head ..	2nd „ ..	Flashing	10	„	„
Brothers (in Cook Strait)	2nd „ ..	„	10	„ ..	„
	..	Fixed ..	..	Red, to show over Cook Rock	
Cape Campbell	2nd „ ..	Revolving	60	White	„
Godley Head (Lyttelton)	2nd „ ..	Fixed ..	..	„	Stone.
Akaroa Head ..	2nd „ ..	Flashing	10	„	Timber.
Moeraki ..	3rd „ ..	Fixed ..	..	„	„
Taiaroa Head ..	3rd „ ..	„ ..	..	Red	Stone.
Cape Saunders..	2nd „ ..	Revolving	60	White	Timber.
Nugget Point ..	1st „ ..	Fixed ..	..	„	Stone.
Waipapapa Point	2nd „ ..	Flashing	10	„	Timber.
	Catadioptric.				
Dog Island ..	1st order ..	Revolving	30	„	Stone.
	Dioptric.				
Centre Island ..	1st order ..	Fixed ..	..	White, with red arcs over inshore dangers	Timber.
Puysegur Point	1st „ ..	Flashing	10	White	„
Cape Foulwind	2nd „ ..	Revolving	30	„	„
Farewell Spit ..	2nd „ ..	„	60	White, with red arc over Spit end	„
Nelson ..	4th „ ..	Fixed ..	..	White, with red arc to mark limit of anchorage	Iron.
French Pass ..	6th „ ..	„ ..	..	Red and white, with white light on beacon	„
Stephens Island	1st „	Group flashing	30	White	„

ANNUAL PENSIONS

PAID BY THE GOVERNMENT OF NEW ZEALAND, AS ON 31ST MARCH, 1903.

Name.	Date from which Pension commenced.	Amount. £	s.	d.
*Under "The Civil Service Act, 1866."**				
Andrews, A. ..	1 May, 1896	141	12	0
Anderson, T. G...	6 Jan., 1896	261	18	1
Bacon, T. ..	1 Nov., 1901	96	4	0
Baddeley, H. C...	12 Jan., 1888	225	0	0
Baker, E. ..	1 Nov., 1880	214	17	1
Barnes, G. H. ..	16 Feb., 1896	100	0	0
Batkin, C. T. ..	1 April, 1890	533	6	0
Bertrand, J. R. ..	17 Feb., 1895	135	0	0
Bicknell, F. ..	1 Feb., 1882	96	13	4
Blomfield, J. ..	21 Mar., 1889	101	15	0
Boers, W. G. ..	24 Oct., 1901	73	13	7
Bridson, W. ..	1 Aug., 1893	146	8	7
Browne, G. J. ..	1 Mar., 1902	200	0	0
Brown, W. R. E.	1 Aug., 1892	265	16	8
Bull, J. ..	1 Nov., 1902	221	13	4
Burgess, A. ..	1 June, 1886	116	13	4
Burke, J. ..	1 July, 1899	89	0	11
Burns, J. ..	1 April, 1902	197	6	8
Butts, E. D. ..	1 April, 1893	258	6	8
Calders, H. ..	1 Nov., 1902	255	0	0
Campbell, F. E...	1 Mar., 1890	466	13	0
Campbell, R. A. F.	1 Aug., 1901	155	0	0
Catley, J. T. ..	1 Oct., 1898	223	6	8
Cheesman, W. F.	1 April, 1890	154	15	1
Clarke, H. T. ..	1 Jan., 1879	400	0	0
Clarke, H. ..	1 Oct., 1879	98	13	0
Coney, J. C. ..	1 Feb., 1902	283	6	8
Cook, R. C. ..	1 Sept., 1895	160	14	3
Costall, J. ..	10 July, 1892	131	3	10
Creeke, W. ..	1 April, 1891	52	15	8
Crowe, A. ..	31 Dec., 1885	68	12	3
Culpan, W. ..	1 Dec., 1868	62	10	0
Cunningham, J...	1 Feb., 1888	175	0	0
Denham, E. ..	1 Aug., 1902	316	13	4
Dick, S. J. ..	1 Feb., 1893	250	0	0
Dickey, A. J. ..	1 Nov., 1875	122	0	5
Earle, J. ..	13 Nov., 1888	104	10	0
Elliott, S. ..	1 July, 1898	110	11	4
Falck, F. ..	1 Mar., 1893	125	13	4
Freeth, J. J. ...	1 Mar., 1894	116	13	4
Gill, R. J. ..	1 Sept., 1886	228	11	5
Gore, R. B. ..	1 Oct., 1902	276	0	0
Graham, G. H. ..	8 Sept., 1891	52	10	0
Giles, J. ..	1 Feb., 1894	238	6	8
Under "The Civil Service Act, 1866"—continued.*				
Halliday, C. ..	31 Aug., 1886	96	13	4
Hamilton, M. ..	11 July, 1880	200	0	0
Hart, A. ..	1 April, 1902	215	16	8
Hart, J. T. ..	12 Nov., 1890	193	7	0
Haselden, C. J. A.	1 July, 1896	255	19	1
Heddell, P. ..	17 Oct., 1894	90	0	0
Henn, J. ..	1 April, 1893	88	3	4
Hill, C. J. ..	9 Feb., 1895	72	0	0
Holden, T. ..	13 Oct., 1878	31	5	0
Jackman, S. J. ...	1 May, 1892	149	6	8
Johnson, J. W ...	1 May, 1893	78	1	6
Johnston, S. ..	8 June, 1900	173	8	3
Kaye, R. ..	1 Dec., 1901	216	13	4
Keetley, E. ..	1 July, 1884	18	12	10
Kissling, T. ..	1 Jan., 1894	317	5	2
Laing, E. B. ..	1 April, 1887	112	10	0
Laing, W. ..	1 Feb., 1896	212	10	0
Lang, A. ..	1 Feb., 1893	75	15	3
Lincoln, R. S. ..	1 Mar., 1889	68	17	0
Lodge, W. F. ..	1 Oct., 1881	185	0	0
Lubecki, A. D. ..	1 April, 1896	200	0	0
Marshed, E. T. ..	1 Jan., 1902	185	0	0
Millar, G. ..	1 Feb., 1896	80	7	0
Miller, F. ..	1 April, 1899	141	13	4
Mitford, G. M. ..	1 Feb., 1869	196	15	0
Monson, J. R. ..	1 Oct., 1882	271	16	0
Monro, H. A. H.	1 Nov., 1880	342	17	2
Morpeth, W. J...	4 Aug., 1894	195	4	9
Morrow, H. ..	1 June, 1890	120	16	8
McCulloch, H. ..	1 Aug., 1890	233	0	0
MacDonnell, R. T.	23 July, 1890	150	0	0
McKellar, D. ..	1 Nov., 1901	347	13	9
McKellar, H. S...	1 Aug., 1892	433	6	8
McPherson, D. ..	1 Mar., 1903	179	1	10
Nelson, J. ..	1 Oct., 1901	90	0	0
Norris, E. F. ..	1 Oct., 1895	88	17	9
Nuttall, J. ..	1 July, 1897	74	13	4
O'Connor, R. ..	1 Sept., 1892	147	0	6
Palmer, T. ..	3 April, 1902	107	18	4
Parris, R. ..	1 Jan., 1877	314	5	8
Pasley, E. W. ..	1 Nov., 1901	215	16	8
Pearson, W. H...	30 Sept., 1884	340	9	6
Phillips, W. M. ..	1 Dec., 1894	69	4	5
Pickett, R. ..	1 Aug., 1866	209	10	6

* By an Act passed in 1871 the pension system was abolished in New Zealand, and in 1893 the Civil Service Insurance Act was passed.

ANNUAL PENSIONS—*continued.*

Name.	Date from which Pension commenced.	Amount.		
Under "The Civil Service Act, 1866"—continued.		£	s.	d.
Pinwill, A. ..	1 July, 1891	120	17	0
Pitt, H. ..	1 May, 1881	100	0	0
Powell, D. ..	1 July, 1893	44	1	8
Rawson, C. E. ..	1 Dec., 1895	244	0	11
Reid, W. S. ..	1 Nov., 1900	500	0	0
Rennell, W. ..	1 Dec., 1895	167	18	4
Robertson, J. ..	6 Oct., 1892	155	0	0
Rodgerson, W. J.	1 July, 1892	248	6	8
Rowe, C. ..	1 Oct., 1894	109	16	0
Searancke, W. N.	1 Feb., 1879	240	0	0
Shrimpton, J. ..	16 July, 1889	146	14	0
Silvius, H. ..	17 Jan., 1900	72	10	0
Sinclair, A. ..	1 June, 1878	195	0	0
Slater, J. ..	1 April, 1898	223	16	2
Smith, J. ..	1 June, 1894	49	5	6
Smith, S. P. ..	1 Nov., 1900	500	0	0
Smith, T. H. ..	1 July, 1876	371	8	7
Stevens, F. ..	1 Dec., 1892	189	0	0
Stewart, J. T. ..	1 May, 1889	300	0	0
Swingland, P. ..	1 Nov., 1899	96	0	0
Teesdale, F. ..	7 Oct., 1899	118	16	8
Tennant, J. ..	1 Jan., 1901	293	6	8
Thomas, G. W. ..	1 Nov., 1875	38	15	0
Thompson, R. ..	1 Mar., 1896	220	0	0
Tizard, E. F. ..	1 July, 1888	180	19	0
Treseder, P. ..	13 Oct., 1897	184	3	4
Tucker, W. ..	31 Dec., 1880	104	13	4
Veale, J. S. ..	1 Sept., 1887	56	2	10
Von Sturmer, S...	1 July, 1895	288	1	11
Wardell, H. S. ..	1 July, 1888	366	13	0
Weetman, S. ..	1 Mar., 1902	308	6	8
White, C. ..	8 Mar., 1902	93	6	8
White, W. ..	1 July, 1881	36	5	0
White, W. B. ..	1 July, 1873	375	4	9
Williams, E. M...	1 April, 1880	135	0	0
Woon, J. G. ..	1 July, 1892	209	10	6
Wrigg, H. C. W.	1 Aug., 1889	157	2	10
Under "The Hamerton Pension Act, 1891."				
Hamerton, R. C.	11 Sept., 1891	250	0	0
Under "The Meredith and Others Pensions Act, 1870."				
Hamlin, Rhoda B.	— 1865	50	0	0
Under "The Military Pensions Act, 1866."				
Adamson, T. ..	(a)	0	2	2*
Apera te Keunga	14 May, 1864	0	2	6*
Barron, T. ..	27 Aug., 1901	0	1	0*
Beamish, J. G.	(b)	0	1	6*
Brown, M. R. ..	..	75	0	0
Corbett, George	(c)	0	2	0*
Crawford, C. F.	..	0	2	0*
Gibbons, M. C...	12 Oct., 1869	0	2	2*
Hamblyn, J. ..	1 Oct., 1872	0	2	2*
Hastings, L. ..	..	55	0	0
Kelly, T. ..	9 April, 1870	0	2	2*
Kershaw, P. ..	9 Aug., 1869	0	1	6*
Lacey, Garrett..	..	0	2	2*
Lake, T. ..	..	0	2	6*
Lloyd, T. ..	(d)	0	2	0*
Marara, Ngakoa	3 Dec., 1860	36	0	0
Matiu Whitiki..	1 April, 1885	0	0	6*
Manparoa ..	1 July, 1867	0	1	0*
McDonald, E.	..	36	0	0
McDonnell, W.	..	150	0	0
McDougall, T. R.	1 April, 1898	40	0	0
McKay, G. ..	..	0	1	0*
McMahon, T. ..	(e)	0	2	0*
Mehaka Kepa ..	2 Aug., 1865	0	0	9*
Morrison, Ann..	26 Oct., 1866	36	0	0
Pera Taitimu ..	12 Oct., 1869	0	1	0*
Ross, Edward O.	17 Nov., 1866	75	0	0
Shanaghan, J...	..	0	1	6*
Shepherd, R. ..	(f)	0	2	8*
Timms, W. ..	(g)	0	1	6*
Tuffin, G. ..	..	0	2	2*
Vance, R. ..	8 April, 1870	0	2	2*
Walsh, W. ..	15 Nov., 1866	0	1	6*
Wasley, Edw. O.	(h)	0	2	2*
Williamson, F.	1 June, 1869	0	2	0*

* Per diem.

(a) 1s. 6d. from 25th October, 1869; increased to 2s. 2d., 7th December, 1870.

(b) 1s. from 17th December, 1868, to 17th December, 1869; 1s. 6d. from 17th December, 1869, to 17th December, 1870; 8d. from 17th December, 1870, to 30th September, 1874; increased to 1s. 6d 1st October, 1874.

(c) 2s. from 5th June, 1867, to 5th June, 1868; 2s. from 5th June, 1868, to 5th June, 1869; permanent from 9th November, 1869.

(d) 2nd October, 1869; ceased on 9th April, 1870; renewed, 22nd April, 1874.

(e) 1s. 6d. from —, 1867; increased to 2s. from 14th February, 1868.

(f) 1s. for twelve months, from 9th April, 1870; 2s. 8d., permanent, from 1st May, 1871.

(g) 1s. 6d. for twelve months, from 18th October, 1869; 1s. 6d. for twelve months, from October, 1870; permanent, from 5th November, 1871.

(h) 1s. 6d. for eight months, from 20th September, 1869; 2s. 2d. for twelve months, from 11th June, 1870; 2s. 2d. for twelve months, from 11th June, 1871; 2s. 2d. from 11th June, 1872; permanent from 12th June, 1873.

ANNUAL PENSIONS—*continued.*

Name.	Date from which Pension commenced.	Amount. £ s. d.
Under "The Military Pensions Extension to Contingents Act, 1900."		
Anderson, L. C.	27 Feb., 1902	26 0 0
Atkinson, M. J.	29 April, 1901	26 0 0
Beath, A. M. ..	10 Sept., 1902	36 0 0
Berry, Mrs. Charlotte, and children	11 June, 1900	74 0 0
Canavan, M. ..	19 June, 1901	0 2 0*
Clarke, J. L. ..	18 Sept., 1902	39 0 0
Clarke, M. ..	14 Jan., 1901	26 0 0
Collins, Lieut. Robt. W. G.	16 Aug., 1901	100 0 0
Connel, Mrs. M. A.	17 Jan., 1901	26 0 0
Culling, J. ..	7 July, 1901	0 2 2*
Donkin, A. ..	1 June, 1901	26 0 0
Dungan, M. ..	4 Oct., 1901	26 0 0
Fahey, J. V. ..	27 Oct., 1901	0 2 2*
Foreman, R. G.	15 Sept., 1902	36 0 0
Francis, C. J. (and four children)	1 April, 1901	180 0 0
Geddes, G. ..	6 Sept., 1902	0 2 2*
Harvey, Mrs. M. P.	16 Aug., 1900	50 0 0
Leece, W. H. ..	23 Aug., 1901	40 0 0
Lockett, E. B...	22 Oct., 1902	54 0 0
Love, Mrs. S., and children	25 Aug., 1901	66 0 0
Rees, H. ..	8 Sept., 1902	39 0 0
Roddick, H. ..	24 Feb., 1902	26 0 0
Sutherland, J...	24 Sept., 1902	27 0 0
Young, R. R. ..	8 Sept., 1902	0 2 2*

Name.	Date from which Pension commenced.	Amount. £ s. d.
Under "The Walsh and Other Pensions Act, 1869."		
Hewett, Ellen A.	10 Feb., 1865	50 0 0
Under "The Supreme Court Judges Act, 1858 Amendment Act, 1874," and "The Supreme Court Act, 1882."		
Prendergast, Sir J.	26 May, 1899	1133 6 8
Under "The Militia Act Amendment Act, 1862."		
Bending, W. ..	..	0 2 0*
Bilton, F. ..	..	0 2 0*
Cody, W. ..	..	0 1 0*
Dunn, A. J. N...	..	0 2 0*
King, E. M. ..	..	80 0 0
Leaf, R. ..	(1)	0 0 6*
Skinner, W. H.	..	0 2 6*
Vickery, W. ..	..	0 2 0*
Woolfe, T. ..	..	0 2 0*
Under "The Schafer, McGuire, and Others Pensions Act, 1872."		
McGuire, E. ..	29 Sept., 1871	0 1 0*
Russell, W. ..	1 July, 1871	0 1 0*

* Per diem.

(1) 1s. from 10th May, 1865; renewed for twelve months, April, 1866 again renewed for twelve months; 8d. for twelve months, from 1868 to 10th May, 1869; 6d. for twelve months, from May, 1869; permanent from 11th May, 1870.

New Zealand Cross Gratuities (£10 per Annum).

Adamson, Thomas, 7th May, 1869.
Black, Solomon, 10th March, 1869.
Biddle, Benjamin, 10th March, 1869.
Hill, George, 10th April, 1869.
Lingard, William, 10th March, 1869.
Mace, Francis Joseph, 10th March, 1869.
Maling, Christopher, 10th March, 1869.
Mair, Gilbert, 7th February, 1870.
Preece, George, 10th March, 1869.
Roberts, John Mackintosh, 10th March, 1869.
Rodriguez, Antonio, 10th March, 1869.
Shepherd, Richard, 13th March, 1869.

Miscellaneous Pensions.

Pensions of late Provincial Government, Nelson—Mrs. Robinson's three daughters, £100.

Pension to Mrs. Elizabeth Ford, £46; pension of late F. G. Rawson continued to his widow, £45; pension to Aperahama Tahumirangi for wounds received when in the service of the New Zealand Government, £10.

NEW ZEALAND NEWSPAPERS.

THERE are (January, 1903) 206 publications on the register of newspapers for New Zealand. Of these, fifty-six are daily papers, twenty-eight are published three times a week, twenty-six twice a week, sixty-two once a week, one three times a month, three fortnightly, one three-weekly, and twenty-nine monthly.

The names of the newspapers, with the postal districts and towns in which they are printed, are given in the following list, the second column showing the day or period of publication.

M. signifies morning paper; E. evening paper:—

AUCKLAND.

Auckland—	
Auckland Star (E.)	Daily.
Auckland Weekly News and Town and Country Journal (M)	Saturday
Bible Standard (M.)	Monthly.
Catholic Chronicle (M.)	"
Christian Worker	"
Church Gazette (M.)	"
Danica (M.)	Thrice monthly (1st, 10th, 20th)
New Zealand A B C Guide	Monthly.
New Zealand Farmer, Bee and Poultry Journal (M.)	"
New Zealand Graphic, Ladies' Journal, and Youths' Companion	Wednesday.
New Zealand Herald (M.)	Daily.
New Zealand Illustrated Magazine	Monthly.
New Zealand Illustrated Sporting Review and Licensed Victualler's Gazette (M.)	Thursday.
New Zealand Illustrated Tit-Bits (M.)	Saturday.
New Zealand Joyful News	Monthly.
Observer (M.)	Saturday.
Pilot (M.)	Monthly.
Produce Circular and Monthly Report (M.)	Monthly.
Saturday Night (E.)	Saturday.
Sharland's Trade Journal	Saturday.
Coromandel—	
Coromandel County News (E).	Tuesday, Friday.
Dargaville—	
Wairoa Bell and Northern Advertiser (E.)	" "
Hamilton—	
Waikato Argus (E.)	Daily.
Waikato Times and Thames Valley Gazette (E.)	"
Kawakawa—	
Northern Luminary (E.)	Friday.
Kawhia—	
Kawhia Settler and Raglan Advertiser (M.)	Saturday.
Onehunga—	
Manukau and Franklin Mail and Auckland Courier (E.)	Friday.
Manukau County Chronicle (M.)	Saturday.
Weekly Onehunga Independent and District Advertiser (M.)	"
Rotorua—	
Hot Lakes Chronicle (M.)	"
Warkworth—	
Rodney and Otamatea Times, Waitemata and Kaipara Gazette (M.)	Friday.
Whangarei—	
Northern Advocate (E.)	Daily.
Northern Chronicle (E.)	Saturday.

THAMES.

Karangahake—	
Goldfields Advocate and Ohinemuri County Chronicle (M.)	Tues., Thur., Sat.
Opotiki—	
East Coast Guardian (E.)	Wed., Saturday.
Opotiki Herald, Whakatane County and East Coast Gazette (E.)	Tuesday, Friday.
Paeroa—	
Ohinemuri Gazette (E.)	Mon., Wed., Fri.
Tauranga—	
Bay of Plenty Times and Thames Valley Warden (E.)	Mon., Wed., Fri.
Te Aroha—	
Te Aroha and Ohinemuri News and Upper Thames Advocate (M.)	Tues., Thur., Sat.
Thames—	
Thames Advertiser and Miners' News (M.)	Daily.
Thames Star (E.)	"
Waihi—	
Waihi Daily Telegraph (E.)	Daily.
Waitekauri—	
Golden Age (E.)	Wed., Saturday.

GISBORNE.

Gisborne—	
Gisborne Times (M.)	Daily.
Poverty Bay Herald (E.)	"

NEW PLYMOUTH.

Inglewood—	
Inglewood Record and Waitara Age (E.)	Mon., Wed., Fri.
New Plymouth—	
Budget and Taranaki Weekly Herald (M.)	Saturday.
Daily News (M.)	Daily.
Taranaki Herald (E.)	"
Taranaki News (M.)	Saturday.
Opunake—	
Opunake Times (E.)	Tuesday, Friday.
Stratford—	
Egmont Post (E.)	Tues., Thur., Sat.
Egmont Settler (E.)	Mon., Wed., Fri.
Waitara—	
Waitara Evening Mail and Clifton County Chronicle (E.)	" " "

NAPIER.

Dannevirke—	
Dannevirke Advocate (E.)	Daily.
Dannevirke Daily Press (E.)	"
Hastings—	
Hastings Standard (E.)	"
Napier—	
Daily Telegraph (E.)	"
Hawke's Bay Herald (M.)	"
New Zealand Fire and Ambulance Record (M.)	Monthly.
Waipawa—	
Waipawa Mail (E.)	Tues., Thur., Sat.
Wairoa—	
Wairoa Guardian and County Advocate (M.)	Tuesday, Friday.

WANGANUI.

Eltham—	
Eltham Argus and Rawhitiroa and Kaponga Advertiser (E.)	Daily.
Hawera—	
Egmont Star (M.)	Saturday.
Hawera and Normanby Star, Patea County Chronicle, and Waimate Plains Gazette (E.)	Daily.

Hunterville—
Hunterville Express, and Upper Rangitikei Advertiser (E.) Tues., Thur., Sat.
Manaia—
Waimate Witness (E.) .. .. Mon., Wed., Fri.
Mangaweka—
Settler (E.) .. .. Wed., Saturday.
Marton—
Rangitikei Advocate and Manawatu Argus (E.) .. .. Daily.
Patea—
Patea County Press (E.) .. .. .. Mon., Wed., Fri.
Taihape—
Post (M.) .. .. Thursday.
Wanganui—
New Zealand Good Templar Watchword (M.) .. .. Monthly.
New Zealand Tit Bits (M.) .. .. .. Saturday.
Wanganui Chronicle and Patea-Rangitikei Advertiser (M.) .. .. Daily.
Wanganui Herald (E.) .. .. "
Weekly Chronicle and Patea-Rangitikei Record (M.) .. Saturday.
Yeoman (M.) .. .. Friday.

WELLINGTON.

Carterton—
Wairarapa Leader (E.) .. .. Mon., Wed., Fri.
Wairarapa Observer, Featherston Chronicle, East Coast Advertiser, and South County Gazette (E.) .. Tues., Thur., Sat.
Eketahuna—
Eketahuna Express and North Wairarapa Courier (E.) .. " " "
Farmers Friend (M.) .. .. Monthly (1st).
Feilding—
Feilding Star (E.) .. .. Daily.
Foxton—
Manawatu Herald (E.) .. .. Tues., Thur., Sat.
Greytown North—
Te Puke ki Hikurangi (E.) .. .. .. Tues., fortnightly.
Wairarapa Standard and Featherston Advocate (E.) .. Mon., Wed., Fri.
Levin—
Manawatu Farmer and Horowhenua County Chronicle (E.) " " "
Masterton—
Wairarapa Age (M.) .. .. Daily.
Wairarapa Daily Times (E.) .. .. .. "
Weekly Star and Wellington District Advertiser (M.) .. Thursday.
Otaki—
Otaki Mail and Horowhenua County and West Coast Advertiser (M.) .. .. Tues., Thur., Sat.
Pahiatua—
Pahiatua Herald (E.) .. .. Mon., Wed., Fri.
Palmerston North—
Manawatu Daily Standard, Rangitikei Advertiser, and West Coast Gazette (E.) .. .. .. Daily.
Manawatu Daily Times (M.) .. .. .. "
Petone—
Hutt and Petone Chronicle (E.) .. .. .. Tuesday, Friday.
Wellington—
Church Chronicle (M.) .. .. Monthly.
Democrat (E.) .. .. Friday.
Evening Post (E.) .. .. Daily.
Mercantile Record (M.) .. .. Saturday.
New Zealand Craftsman (M.) .. .. .. Monthly.
New Zealand Dairyman and Farmers' Union Journal (E.) "
New Zealand Field (M.) .. .. .. Friday.

Wellington—*continued.*
- New Zealand Free Lance (M.) .. .. .. Saturday.
- New Zealand Mail, Town and Country Advertiser (M) .. Wednesday.
- New Zealand Mines Record (M.) .. .. .. Monthly.
- New Zealand Times (M.) .. .. .. Daily.
- Register and Property Investors' Guide (M). .. .. Monthly.
- Sport (M.) .. .. Saturday.
- Wellington Price Current and New Zealand Trade Review (M.) .. .. Three-weekly.

Woodville—
- Woodville Examiner (E.) .. .. .. Mon., Wed., Fri.

BLENHEIM.

Blenheim—
- Marlborough Daily Times and Town and Country Advertiser (M.) .. .. Daily.
- Marlborough Express (E.) .. ..

Havelock—
- Pelorus Guardian and Miners' Advocate (M.) .. .. Tuesday, Friday.

Picton—
- Marlborough Press, County of Sounds Gazette (M.) .. " "

NELSON.

Collingwood—
- Golden Bay Argus (E.) .. .. Thursday.

Motueka—
- Motueka Star (E) .. .. Tuesday, Friday.

Nelson—
- Colonist (M.) .. .. Daily.
- Nelson Evening Mail (E.) .. .. .. "

Takaka—
- Takaka News and Collingwood Advertiser (E.) .. Thursday.

WESTPORT.

Charleston—
- Charleston Herald, Brighton Times, and Croninville Reporter (M.) .. .. Wed., Saturday.

Murchison—
- Buller Post (E.) .. .. Tuesday.

Westport—
- Buller Miner (M.) .. .. Friday.
- Westport News (M.) .. .. Daily.
- Westport Times and Evening Star (E.) .. .. "

GREYMOUTH.

Greymouth—
- Evening Star and Brunnerton Advocate (E.) .. .. Daily.
- Grey River Argus (M.) .. .. "
- Weekly Argus (M.) .. .. Weekly.

Reefton—
- Inangahua Herald and New Zealand Miner (M.) .. Daily.
- Inangahua Times and Reefton Guardian (E.) .. .. "

HOKITIKA.

Hokitika—
- Hokitika Guardian and Evening Star (E.) .. .. Daily.
- Leader (M.) .. .. Saturday.
- West Coast Times (M.) .. .. Daily.

Kumara—
- Kumara Times and Dillman's and Goldsborough Advertiser (M.) .. .. Daily.

Ross—
- Ross and Okarito Advocate and Westland Advertiser (M.) Wed., Saturday.

CHRISTCHURCH.

Akaroa—	
Akaroa Mail and Banks Peninsula Advertiser (M.)	Tuesday, Friday.
Ashburton—	
Ashburton Guardian (E.)	Daily.
Ashburton Mail, Rakaia, Mount Somers, and Alford Forest Advertiser (M.)	Tues., Thur., Sat.
Ashburton Standard and Farmers' Advocate (M.)	" " "
Cheviot—	
Cheviot News (M.)	Tuesday, Friday.
Christchurch—	
Canterbury Times (incorporating "Sportsman" and "New Zealand Cyclist") (M.)	Wednesday.
Lyttelton Times (M.)	Daily.
Mercantile and Bankruptcy Gazette of New Zealand (E.)	Wednesday.
New Zealand Baptist (E.)	Monthly.
New Zealand Church News (M.)	"
New Zealand Fanciers' Chronicle (M.)	"
New Zealand Railway Review (E.)	"
New Zealand Schoolmaster (E.)	"
New Zealand War Cry and Official Gazette of the Salvation Army (M.)	Saturday.
New Zealand Wheelman (M.)	Wednesday.
Press (M.)	Daily.
Prohibitionist (E.)	Fri., fortnightly.
Spectator (M.)	Tuesday.
Star (E.)	Daily.
Truth (E.)	"
Weekly Press (incorporating "The Referee") (M.)	Wednesday.
Kaikoura—	
Kaikoura Star and North Canterbury and South Marlborough News (E.)	Daily.
Rangiora—	
Standard and North Canterbury Guardian (M.)	Wed., Saturday.
Southbridge—	
Ellesmere Guardian (M.)	" "

TIMARU.

Temuka—	
Geraldine Guardian (M.)	Tues., Thur., Sat.
Temuka Leader (M.)	" " "
Timaru—	
Timaru Herald (M.)	Daily.
Timaru Post (E.)	"
Waimate—	
Waimate Advertiser (M.)	Saturday.
Waimate Times (M.)	Tues., Thur., Sat.

OAMARU.

Oamaru—	
North Otago Times (M.)	Daily.
Oamaru Mail (E.)	"

DUNEDIN.

Alexandra South—	
Alexandra Herald and Central Otago Gazette (M.)	Thursday.
Balclutha—	
Clutha Leader (M.)	Tuesday, Friday.
Free Press (M.)	" "
Clyde—	
Dunstan Times, Vincent County Official Gazette, and General Goldfields Advertiser (M.)	Tuesday.
Cromwell—	
Cromwell Argus and Northern Goldfields Gazette (M.)	Tuesday.

Dunedin—	
Evening Star (E.)	Daily.
Farmers' Circular (M.)	Thur., fortn'ly
Katipo	Monthly.
New Zealand Guardian (M.)	"
New Zealand Journal of Education	"
New Zealand Mining, Engineering, and Building Journal (M.)	Thursday.
New Zealand Tablet (M.)	Friday.
Otago Daily Times (M.)	Daily.
Otago Witness (M.)	Thursday.
Otago Liberal and Workman (M)	Saturday
Outlook (M.)	"
Schoolmates	Monthly.
Trade Review and Farmers' Gazette (M.)	Thursday.
Triad (M.)	Monthly.
Weekly Budget (M.)	Saturday.
Lawrence—	
Tuapeka Times (M.)	Wed., Saturday.
Milton—	
Bruce Herald (M.)	Tuesday, Friday
Mosgiel—	
Taieri Advocate (M.)	Wed., Saturday.
Naseby—	
Mount Ida Chronicle (M.)	Friday.
Palmerston—	
Palmerston and Waikouaiti Times (M.)	Friday.
Roxburgh—	
Mount Benger Mail (M.)	Saturday.
Tapanui—	
Tapanui Courier and Central Districts Gazette (M.)	Wednesday.

INVERCARGILL.

Arrowtown—	
Lake County Press (E.)	Thursday.
Gore—	
Mataura Ensign (E.)	Tues., Thur., Sat.
Southern Standard (M.)	Tuesday, Friday.
Invercargill—	
Southern Cross (M.)	Saturday.
Southlander (M.)	Friday.
Southland Daily News (E.)	Daily.
Southland Times (M.)	"
Weekly Times (M.)	Friday.
Orepuki—	
Orepuki Advocate (M.)	Saturday.
Queenstown—	
Lake Wakatipu Mail (E.)	"
Riverton—	
Western Star and Wallace County Gazette (E.)	Tues., Friday.
Winton—	
Winton Record and Hokonui Advocate (M.)	Friday.
Wyndham—	
Wyndham Farmer (M.)	Mon., Wed., Fri.
Wyndham Herald (M.)	Tuesday, Friday.

The foregoing towns are arranged according to the postal district in which they are situated.

Taking the provincial districts, Auckland has 45 publications registered as newspapers, Taranaki 13, Hawke's Bay 9, Wellington 42, Marlborough 4, Nelson 13, Westland 8, Canterbury 29, and Otago 43.

THE CUSTOMS TARIFF OF NEW ZEALAND,

Under the Customs and Excise Duties Acts, 1888 and 1895, "The Tobacco Excise Duties Act, 1896," and "The Customs Duties Amendment Act, 1900."

TABLE OF DUTIES.

THE headings of the respective classes in this Table and in the Table of Exemptions are used solely for convenience of classification, and shall not in any way affect the articles specified therein, or be construed to indicate the material of which any such article is made.

The word "iron" includes steel, or steel and iron combined.

Neither steam-engines, nor parts of steam-engines, nor steam-boilers (land or marine) are included in the expression "machines" or "machinery" in either this Table or the Table of Exemptions.

The abbreviaton "n.o.e." means not otherwise enumerated.

In computing "ad valorem" duties the *invoice* value of the goods is increased by 10 per cent.

CLASS I.—FOODS AND ARTICLES FOR HUMAN CONSUMPTION.

Names of Articles and Rates of Duty.

1. Almonds, in shell, 2d. the lb.
2. Almonds, shelled, n.o.e., 3d. the lb.
3. Bacon and hams, 2d. the lb.
4. Biscuits, ships' plain and unsweetened, 3s. the cwt.
5. Biscuits, other kinds, 2d. the lb.
6. Boiled sugars, comfits, lozenges, Scotch mixtures, and sugar-candy, 2d. the lb., including internal packages.
7. Candied peel and drained peel, 3d. the lb.
8. Capers, caraway seeds, catsup, cayenne pepper, chillies, chutney, curry-powder and -paste, fish-paste, gelatine, isinglass, liquorice, olives, 20 per cent. *ad valorem.*
9. Chocolate confectionery, and all preparations of chocolate or cocoa—
   In plain trade packages, 3d. the lb.
   In fancy packages, or in small packages for retail sale, 20 per cent. *ad valorem.*
10. Confectionery n.o.e., 2d. the lb., including internal packages.
11. Currants, 1d. the lb.
12. Fish, dried, pickled, or salted, n.o.e., 10s. the cwt.
13. Fish, potted and preserved, 2d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.
14. Fruit, fresh, viz.:—
    Apples, pears, plums, cherries, peaches, nectarines, medlars, apricots, quinces, tomatoes, 1d. the lb.
    (No duty exceeding ½d. the lb. to be levied on apples and pears from 14th July to 31st December.)
    Currants, raspberries, gooseberries, blackberries, and strawberries, ½d. the lb.
    Lemons, ½d. the lb.
15. Fruits, dried, 2d. the lb.
16. Fruits, preserved in juice or syrup, 25 per cent. *ad valorem.*
17. Fruit-pulp, and partially preserved fruit n.o.e., 1½d. the lb.
18. Fruits preserved by sulphurous acid, 1d. the lb.
19. Glucose, 1d. the lb.
20. Honey, 2d. the lb.
21. Jams, jellies, marmalade, and preserves, 2d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.

22. Jellies concentrated in tablets or powder, 4d. the lb.
23. Maizena and cornflour, ½d. the lb.
24. Meats, potted or preserved, 20 per cent. *ad valorem.*
25. Milk, preserved, 25 per cent. *ad valorem.*
26. Mustard, 2d. the lb.
27. Nuts of all kinds, except cocoa-nuts, 2d. the lb.
28. Oysters, preserved, 2d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.
29. Pearl barley, 1s. the cwt.
30. Peas, split, 2s. the cwt.
31. Pickles, 3s. the imperial gallon.
32. Provisions, n.o.e., 20 per cent. *ad valorem.*
33. Raisins, 1d. the lb.
34. Rice-flour, 6s. the cwt.
35. Sardines, including the oil, 2d. the lb.
36. Sauces, 4s. the imperial gallon.
37. Spices, including pepper and pimento, unground, 2d. the lb.
38. Spices, including pepper and pimento, ground, 4d. the lb.
39. Sugar, ½d. the lb.
40. Treacle and molasses, ½d. the lb.
41. Vegetables, fresh, dried, or preserved, 20 per cent. *ad valorem.*
42. Vinegar, table, not exceeding 6·5 per cent. of acidity,* 6d. the gallon.

Class II.—Tobacco.

43. Cigarettes, not exceeding in weight 2½ lb. per 1,000, 17s. 6d. the 1,000. And for all weight in excess of 2½ lb. per 1,000, 6d. the oz.
44. Cigars, 7s. the lb.
45. Snuff, 7s. the lb.
46. Tobacco, 3s. 6d. the lb.
47. Tobacco, unmanufactured, entered to be manufactured in the colony in any licensed tobacco manufactory, for manufacturing purposes only, into tobacco, cigars, cigarettes, or snuff, 2s. the lb.

Class III.—Alcoholic Beverages, and Materials for Making Same.

48. Ale, beer of all sorts, porter, cider, and perry, the gallon, or for six reputed quart bottles, or 12 reputed pint bottles, 2s. the gallon.
49. Cordials, bitters, and liqueurs, 16s. the liquid gallon.
50. Hops, 6d. the lb.
51. Malt, 2s. the bushel.
52. Rice malt, 1d. the lb.
53. Solid wort, 6d. the lb.
54. Spirits and strong waters, the strength of which can be ascertained by Sykes's hydrometer, 16s. the proof gallon.
    (No allowance beyond 16·5 under proof shall be made for spirits or strong waters of a less hydrometer strength than 16·5 under proof.)
55. Spirits and strong waters, sweetened or mixed, when not exceeding the strength of proof, 16s. the liquid gallon.
56. Spirits and strong waters in cases shall be charged as follows, namely:—
    Two gallons and under, as two gallons; over two gallons and not exceeding three, as three gallons; over three gallons and not exceeding four, as four gallons; and so on for any greater quantity contained in any case.
57. Spirits or strong waters, mixed with ingredients in any proportion exceeding 33 per cent. of proof spirit, and although thereby coming under any other designation, excepting patent or proprietary medicines, or tinctures and medicinal spirits otherwise enumerated, 16s. the liquid gallon.

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* Vinegar exceeding 6·5 per cent. of acidity to be treated as acetic acid.

58. Wine, Australian, containing not more than 35 per cent. of proof spirit verified by Sykes's hydrometer, the gallon, or for six reputed quart bottles, or twelve reputed pint bottles, 5s. the gallon.
59. Wine, other than sparkling and Australian, containing less than 40 per cent. of proof spirit verified by Sykes's hydrometer, the gallon, or for six reputed quart bottles, or twelve reputed pint bottles, 6s. the gallon.
60. Wine, sparkling, 9s. the gallon.

Class IV.—Non-alcoholic Beverages, and Materials for Making Same.

61. Aerated and mineral waters and effervescing beverages, 20 per cent. *ad valorem.*
62. Chicory, 3d. the lb.
63. Chocolate, 3d. the lb.
64. Cocoa, 3d. the lb.
65. Coffee, essence of, 20 per cent. *ad valorem.*
66. Coffee, roasted, 3d. the lb.
67. Syrups; lime- or lemon-juice sweetened; raspberry vinegar, 25 per cent. *ad valorem.*
68. Tea, 2d. the lb.

Class V.—Drugs, Medicines, Chemicals, and Druggists' Sundries.

69. Acid, acetic, n.o.e., containing not more than 30 per cent. of acidity, 1½d. the lb.
    For every 10 per cent. of acidity or fraction thereof additional, ½d. the lb.
70. Acid, tartaric, 1d. the lb.
71. Baking-powder, yeast preparations, and other ferments, 20 per cent. *ad valorem.*
72. Chemicals n.o.e., including photographic chemicals, and glacial acetic acid (B.P. standard), 15 per cent. *ad valorem.*
73. Cream of tartar, 1d. the lb.
74. Drugs and druggists' sundries and apothecaries' wares, n.o.e., 15 per cent. *ad valorem.*
75. Essences, flavouring, spirituous, 16s. the liquid gallon.
76. Essences, flavouring, n.o.e., 15 per cent.
77. Eucalyptus oil, in bulk or bottle, 20 per cent. *ad valorem.*
78. Glycerine, refined, 20 per cent. *ad valorem.*
79. Opium, 40s. the lb.
80. Patent medicines, 15 per cent. *ad valorem.*
81. Proprietary medicines, or medicaments, (1) bearing the name of the proprietor on label or package; (2) bearing a prefixed name in the possessive case; (3) n.o.e., prepared by any occult secret or art, 15 per cent. *ad valorem.*
82. Saccharine, except in the form of tabloids or tablets, 1s. 6d. the ounce.
83. Sarsaparilla, 15 per cent. *ad valorem.*
84. Soda, carbonate and bicarbonate, 1s. the cwt.
85. Soda, crystals, 2s. the cwt.
86. Tinctures and medicinal spirits of any recognised pharmacopœia, containing more than 50 per cent. of proof spirit, 1s. the lb.
87. Tinctures and medicinal spirits of any recognised pharmacopœia, containing 50 per cent. proof spirit or less, 15 per cent. *ad valorem.*

Class VI.—Clothing and Textile Goods.

88. Apparel and ready-made clothing, and all articles n.o.e. made up wholly or in part from textile or other piece-goods, 25 per cent. *ad valorem.*

89. Apparel made by British or foreign tailors, dress-, mantle-, or jacket-makers to the order of residents in the colony, and intended for the individual use of such residents, whether imported by the residents themselves or through an importing firm, 40 per cent. *ad valorem.*
90. Blankets, 20 per cent. *ad valorem.*
91. Collars and cuffs, of paper or other material, 25 per cent. *ad valorem.*
92. Cotton counterpanes, 20 per cent. *ad valorem.*
93. Cotton piece-goods, to include turkey twills, dress prints (hard-spun and plain-woven), where the invoice value does not exceed 4d. the yard; and cotton piece-goods n.o.e., 10 per cent. *ad valorem.*
94. Cotton piece-goods—namely, tapestry; cretonnes; chintz art crêpe, and serges; velveteens, velvets, and plushes, all kinds; damasks; moquette; sateens; linenettes; crepons; crimps; zephyrs; ginghams; turkey twills; prints; printed cottons; piqués; vestings; quiltings, and marcellas; muslins of all kinds; nets; window-nets; hollands, curtains, and blinds; diapers; ticks, including coloured Belgian; towellings; laces, 20 per cent. *ad valorem.*
95. Drapery n.o.e., 20 per cent. *ad valorem.*
96. Feathers, ornamental (including ostrich), and artificial flowers, 25 per cent. *ad valorem.*
97. Forfar, dowlas, and flax sheeting, n.o.e., 20 per cent. *ad valorem.*
98. Furs, 25 per cent. *ad valorem.*
99. Haberdashery n.o.e., 20 per cent. *ad valorem.*
100. Hats of all kinds, including straw hats, also caps, 25 per cent. *ad valorem.*
101. Hosiery n.o.e., 20 per cent. *ad valorem.*
102. Lace, and laces, n.o.e., 25 per cent. *ad valorem.*
103. Millinery of all kinds, including trimmed hats, caps, and bonnets, 25 per cent. *ad valorem.*
104. Ribbons and crape, all kinds, 25 per cent. *ad valorem.*
105. Rugs, woollen, cotton, opossum, or other, 20 per cent. *ad valorem.*
106. Shawls, 20 per cent. *ad valorem.*
107. Silks, satins, velvets, plushes, n.o.e., composed of silk mixed with any other material, in the piece, 25 per cent. *ad valorem.*
108. Textile piece-goods other than cotton or silk, 20 per cent. *ad valorem.*
109. Umbrellas, parasols, and sunshades, 20 per cent. *ad valorem.*
110. Yarns n.o.e., 20 per cent. *ad valorem.*

Class VII.—Leather and Manufactures of Leather.

111. Boots, shoes, and slippers, n.o.e.; goloshes, clogs, pattens, vamps, uppers, and laces, 22½ per cent. *ad valorem.*
112. Heel-plates, and toe-stiffeners and plates, 22½ per cent. *ad valorem.*
113. Leather—
    - Leather belting, and belt-leather, harness, bridle, legging, bag, kip (other than East India), 4d. the lb.
    - Buff and split, including satin hides and tweeds, 3d. the lb.
    - Cordovan, levanted leather, roans, sheepskins, morocco n.o.e., basils, 3d. the lb.
    - Sole-leather, 2d. the lb.
    - East India kip, Persians, lambskins and goatskins (dressed other than morocco), kangaroo and wallabi skins (dressed), tan and coloured calf, 2d. the lb.
    - Leather n.o.e., 1d. the lb.
114. Leather board or compo, 4d. the lb.
115. Leather bags and leather-cloth bags, n.o.e., 20 per cent. *ad valorem.*
116. Leather, chamois, 20 per cent. *ad valorem.*
117. Leather cut into shapes, 22½ per cent. *ad valorem.*
118. Leather leggings, 22½ per cent. *ad valorem.*
119. Leather manufactures n.o.e., 20 per cent. *ad valorem.*

120. Portmanteaux; trunks; travelling-bags and brief-bags of leather or leather-cloth, 10 in. in length and upwards, and carpet-bags, 25 per cent. *ad valorem.*
121. Saddlery, and harness, whips and whip-thongs, 20 per cent. *ad valorem.*

Class VIII.—Furniture and Household Furnishing.

122. Basket- and wicker-ware n.o.e., not being furniture, 20 per cent. *ad valorem.*
123. Carpets, and druggets; floorcloth; mats, and matting, 20 per cent. *ad valorem.*
124. Desks, 20 per cent. *ad valorem.*
125. Furniture and cabinetware, n.o.e., and other than iron, 25 per cent. *ad valorem.*
126. Furniture-, knife-, and plate-powder and polish, 20 per cent. *ad valorem.*
127. Mantelpieces, other than stone, 20 per cent. *ad valorem.*
128. Upholstery n.o.e., 25 per cent. *ad valorem.*

Class IX.—China, Glass, and Earthen Goods.

129. Bricks, known as firebricks, 20 per cent. *ad valorem.*
130. China, porcelain, and parianware, 20 per cent. *ad valorem.*
131. Drainage pipes and tiles, 20 per cent. *ad valorem.*
132. Earthen flooring and garden-tiles, 20 per cent. *ad valorem.*
133. Earthenware, stoneware, and brownware, 20 per cent. *ad valorem.*
134. Filters, 20 per cent. *ad valorem.*
135. Fireclay, ground, and fireclay goods, 20 per cent. *ad valorem.*
136. Glass, crown, sheet, and common window, 2s. the 100 superficial feet.
137. Glassware; also plate-glass, and glass polished, coloured, and other kinds, n.o.e.; globes and chimneys for lamps, 20 per cent. *ad valorem.*
138. Lamps, lanterns, and lampwick, 20 per cent. *ad valorem.*
139. Plate-glass, bevelled or silvered; mirrors and looking-glasses, framed or unframed, 25 per cent. *ad valorem.*

Class X.—Fancy Goods, Musical Instruments, etc.

140. Artificial flies, 25 per cent. *ad valorem.*
141. Cards, playing, 6d. per pack.
142. Clocks, 20 per cent. *ad valorem.*
143. Dressing-cases, 20 per cent. *ad valorem.*
144. Fancy goods, and toys, 20 per cent. *ad valorem.*
145. Fishing tackle, including artificially-baited hooks other than flies, 20 per per cent. *ad valorem.*
146. Jewellery; plate, gold or silver; greenstone, cut or polished, 20 per cent. *ad valorem.*
147. Mouldings in the piece for picture-frames, cornices, or ceilings 15 per cent. *ad valorem.*
148. Musical instruments of all kinds n.o.e., 20 per cent. *ad valorem.*
149. Oil, perfumed, 25 per cent. *ad valorem.*
150. Papier-maché ware, 20 per cent. *ad valorem.*
151. Perfumery n.o.e., 25 per cent. *ad valorem.*
152. Perfumed spirits and Cologne-water, £1 10s. the liquid gallon.
153. Photographic goods n.o.e., 20 per cent. *ad valorem.*
154. Pictures, paintings, drawings, engravings, and photographs, framed or unframed; picture- or photograph-frames and -mounts, 20 per cent. *ad valorem.*
155. Platedware, 20 per cent. *ad valorem.*
156. Statues, statuettes, casts, and bronzes, 20 per cent. *ad valorem.*
157. Tobacco-pipes and -cases, cigar- and cigarette-holders and -cases, cigarette-papers and -cases, 25 per cent. *ad valorem.*
158. Toilet preparations n.o.e., 25 per cent. *ad valorem.*
159. Watches, 20 per cent. *ad valorem.*
160. Walking-sticks, 20 per cent. *ad valorem.*

Class XI.—Paper Manufactures and Stationery.

161. Calendars and show-cards, all kinds, 25 per cent. *ad valorem.*
162. Cardboard boxes complete, or cardboard cut and shaped for boxes (including match-boxes), 25 per cent. *ad valorem.*
163. Directories of New Zealand, or of any part thereof; also covers for directories, 25 per cent. *ad valorem.*
164. Handbills, programmes and circulars, playbills and printed posters, 20 per cent. *ad valorem.*
165. Ink, writing, 20 per cent. *ad valorem.*
166. Paper bags, coarse (including sugar-bags), 7s. 6d. the cwt
167. Paper bags n.o.e., 25 per cent. *ad valorem.*
168. Paper-hangings, 15 per cent. *ad valorem.*
169. Paper wrapping—viz., blue candle, glazed cap, glazed casings, small hand, lumber hand, and tissue, 5s. the cwt.
170. Paper, wrapping, other kinds, including brown, cartridge, and sugar papers, 5s. the cwt.
171. Printing matter relating to patent or proprietary medicines; trade catalogues, price-lists, and fashion-plates of the goods of firms or persons in the colony, 25 per cent. *ad valorem.*
172. Stationery and writing-paper n.o.e., 20 per cent. *ad valorem.*
173. Stationery, manufactured—viz., account-books; manuscript books; bill-head, invoice, and statement forms; printed or ruled paper; counter-books; cheque- and draft-forms; tags; labels; blotting-pads; sketch-books; book-covers; copying letter-books; manifold writers; albums (other than for photographs); diaries; birthday-books; plain or faint-lined ruled books; printed window-tickets; printed, lithographed, or embossed stationery; and Christmas, New Year, birthday, and Easter cards and booklets, 25 per cent. *ad valorem.*
174. Stereotypes and matrices, 25 per cent. *ad valorem.*

Class XII.—Manufactures of Metal.

175. Bicycles, tricycles, and the like vehicles; also finished or partly finished or machined parts of same, n.o.e., including weldless steel tubing cut to short lengths, 20 per cent. *ad valorem.*
176. Boilers, land and marine, 20 per cent. *ad valorem.*
177. Brass cocks, valves, unions, lubricators, and whistles, 20 per cent. *ad valorem.*
178. Brass manufactures, n.o.e., 20 per cent. *ad valorem.*
179. Cartridges (shot), 10- to 24-bore, 1s. 6d. the 100.
180. Cartridge cases, 9d. the 100.
181. Cartridges n.o.e., 20 per cent *ad valorem.*
182. Cash-registering machines, 10 per cent. *ad valorem.*
183. Coffin-furniture, 20 per cent. *ad valorem.*
184. Composition-piping, 3s. 6d. the cwt.
185. Copper manufactures n.o.e., 20 per cent. *ad valorem.*
186. Copying-presses, 20 per cent. *ad valorem.*
187. Crab-winches, cranes n.o.e., capstans, and windlasses, 20 per cent. *ad valorem.*
188. Cutlery, 20 per cent. *ad valorem.*
189. Firearms, all kinds, 20 per cent. *ad valorem.*
190. Galvanised iron manufactures n.o.e., 25 per cent. *ad valorem.*
191. Gasometers, and other apparatus for producing gas; also gas-meters, 10 per cent. *ad valorem.*
192. Gaspipes, iron, 5 per cent. *ad valorem.*
193. Hardware, ironmongery, and holloware, 20 per cent. *ad valorem.*
194. Iron bridges, and iron material n.o.e. for the construction of bridges, wharves, jetties, or patent slips, 20 per cent. *ad valorem.*
195. Iron columns for buildings, and other structural ironwork, 20 per cent. *ad valorem.*
196. Iron doors for safes and vaults, 20 per cent. *ad valorem.*

197. Iron, galvanised corrugated sheets, screws, and nails, 2s. per cwt.
198. Iron galvanised tiles, ridging, guttering, and spouting, 20 per cent. *ad valorem.*
199. Iron gates and gate-posts, staples, standards, straining posts and apparatus, 20 per cent. *ad valorem.*
200. Iron nails, 2s. per cwt.
201. Iron pipes, and fittings for same, including main-cocks, 5 per cent. *ad valorem.*
202. Iron, plain galvanised sheet and hoop, 1s. 6d. the cwt.
203. Iron tanks, exceeding 200 gallons and not exceeding 400 gallons, 10s. each.
204. Iron tanks of and under 200 gallons, 5s. each.
205. Iron work and wire work, 20 per cent. *ad valorem.*
206. Japanned and lacquered metal ware, 25 per cent. *ad valorem.*
207. Lawn-mowers, 20 per cent. *ad valorem.*
208. Lead, in sheets, 1s. 6d. the cwt.
209. Lead piping, 3s. 6d. the cwt.
210. Machinery n.o.e., 20 per cent. *ad valorem.*
211. Machinery, electric, and appliances, 10 per cent. *ad valorem.*
212. Machinery for flour-mills, woollen-mills, paper-mills, rope- and twine-making, dredging, *saw-milling, *planing, oil-refining, boring; and also machinery for refrigerating or preserving meat, leather-splitting machines and band-knives for same, 5 per cent. *ad valorem.*
213. Manufactures, n.o.e., of metal, or of metal in combination with any other material, 20 per cent. *ad valorem.*
214. Nails n.o.e., 3s. the cwt.
215. Printing machines and presses, 5 per cent. *ad valorem.*
216. Pumps and other apparatus for raising water n.o.e., 20 per cent. *ad valorem.*
217. Railway and tramway plant and materials n.o.e., 20 per cent. *ad valorem.*
218. Sad-irons, 20 per cent. *ad valorem.*
219. Shot, 10s. the cwt.
220. Soda-water machines; also, machines for aerating liquids, 5 per cent. *ad valorem.*
221. Steam-engines and parts of steam-engines n.o.e., 20 per cent. *ad valorem.*
222. Steam-engines, and parts thereof, including the boiler or boilers therefor, imported specially for mining or gold-saving purposes and processes, or for dairying purposes, 5 per cent. *ad valorem.*
223. Tinware, and tinsmiths' furniture n.o.e., 25 per cent. *ad valorem.*
224. Waterworks pipes, iron, 5 per cent. *ad valorem.*
225. Weighbridges and weighing-machines, 20 per cent. *ad valorem.*
226. Wire mattresses and webbing, 20 per cent. *ad valorem.*
227. Zinc tiles, ridging, guttering, piping, 20 per cent. *ad valorem.*
228. Zinc manufactures n.o.e., 25 per cent. *ad valorem.*

Class XIII.—Timber, and Articles made from Timber.

229. Bellows, other than forge, 20 per cent. *ad valorem.*
230. Blocks, wooden tackle, 20 per cent. *ad valorem.*
231. Buckets and tubs, of wood, 20 per cent. *ad valorem.*
232. Carriages, carts, drays, wagons, and perambulators, and wheels for the same, 20 per cent. *ad valorem.*
233. Carriage shafts, spokes, and felloes, dressed; bent carriage timber, n.o.e., 20 per cent. *ad valorem.*
234. Doors, glazed with ornamental glass, 4s. each.
235. Doors, plain, 2s. each.
236. Sashes, glazed, with ornamental glass, 4s. the pair.
237. Sashes, plain, 2s. the pair.
238. Timber, palings, 2s. the 100.
239. Timber, posts, 8s. the 100.
240. Timber, rails, 4s. the 100.

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* See also item 418.

241. Timber, sawn, dressed, 4s. the 100 ft. superficial.
242. Timber, sawn, rough, 2s. the 100 ft. superficial.
243. Timber, shingles and laths, 2s. the 1,000.
244. Woodenware and turnery n.o.e, and veneers, 20 per cent. *ad valorem.*

Class XIV.—Oils, Paints, etc.

245. Axle-grease, and other solid lubricants, 20 per cent. *ad valorem.*
246. Harness oil and composition, and leather dressing, 20 per cent. *ad valorem*
247. Naphtha, 6d. the gallon.
248. Oil, linseed, 6d. the gallon.
249. Oil, mineral, including shale-waste or unrefined mineral-oil n.o.e., 6d. the gallon.
250. Oil n.o.e., 6d. the gallon.
251. Oil, olive, in bulk, 6d. the gallon.
252. Oil vegetable, in bulk, n.o.e., 6d. the gallon.
253. Oil vegetable or other, in bottle, 15 per cent. *ad valorem.*
254. Paints and colours ground in oil or turpentine, 2s. 6d. the cwt.
255. Paints and colours mixed ready for use, 5s. the cwt.
256. Putty, 2s. the cwt.
257. Stearine, 1½d. the lb.
258. Stearine for match-making, ¾d. the lb.
259. Varnish ; enamel paints ; gold size, 2s. the gallon.
260. Whiting and chalk, 1s. the cwt.

Class XV.—Agricultural and Farm Products, etc.

261. Animals, food for, of all kinds, n.o.e., 20 per cent. *ad valorem.*
262. Cattle (horned), 10s. each.
263. Chaff, £1 the ton.
264. Grain—namely, barley, 2s. the 100 lb.
265. Grain and pulse of every kind n.o.e., 9d. the 100 lb.
266. Grain and pulse of every kind, when ground or in any way manufactured, n.o.e., 1s. the 100 lb.
267. Horses, £1 each.
268. Linseed, £1 the ton.
269. Maize, 9d. the 100 lb.
270. Onions, £1 the ton.
271. Prepared calf-meal, £1 5s. the ton.

Class XVI.—Miscellaneous.

272. Bags, flour, 20 per cent. *ad valorem.*
273. Bags, calico, forfar, hessian, and linen, 20 per cent. *ad valorem.*
274. Bagging and bags n.o.e., 15 per cent. *ad valorem.*
275. Blacking and boot-gloss, 20 per cent. *ad valorem.*
276. Blacklead, 20 per cent. *ad valorem.*
277. Blue, 2d. the lb.
278. Brooms, brushes, and brushware, n.o.e., 25 per cent. *ad valorem.*
279. Brushes, hair, and combs; toilet- clothes- and hat-brushes, 20 per cent. *ad valorem.*
280. Candles, 1d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.
281. Cement, 2s. the barrel.
282. Cordage and rope, n.o.e., 20 per cent. *ad valorem.*
283. Cork, cut, including bungs, 20 per cent. *ad valorem.*
284. Fireworks n.o.e., 20 per cent. *ad valorem.*
285. Flock, 10 per cent. *ad valorem.*
286. Glue and size, 1½d. the lb.

287. Granite, sawn on not more than two sides, and not dressed or polished, 5 per cent. *ad valorem.*
288. Marble, granite, and other stone, dressed or polished, and articles made therefrom; including mantelpieces, 25 per cent. *ad valorem.*
289. Matches—
Wooden, in boxes containing not more than 60 matches, 1s. the gross of boxes.
In boxes containing over 60 and not more than 100 matches, 2s. the gross of boxes.
In boxes containing more than 100 matches, for every 100 matches or fraction thereof contained in one box, 2s. the gross of boxes.
Wax, "plaid vestas" in cardboard boxes containing under 100 matches, 1s. the gross of boxes.
"Pocket vestas" in tin or other boxes containing under 100 matches, 1s. 4d. the gross of boxes.
"Sportsman's," "Ovals," and "No. 4 tin vestas," in boxes containing not more than 200 matches, 4s. 6d. the gross of boxes.
Wax, other kinds, for every 100 matches or fraction thereof contained in one box, 2s. 3d. the gross of boxes.
290. Nets and netting, 20 per cent. *ad valorem.*
291. Paraffin wax, ⅜d. the lb.
292. Powder, sporting, 6d. the lb.
293. Sacks, other than cornsacks and jute sacks, 15 per cent. *ad valorem.*
294. Sausage-skins and casings (including brine or salt), 3d. per lb.
295. Soap, common yellow, and blue mottled, 5s. the cwt.
296. Soap, n.o.e., 25 per cent. *ad valorem.*
297. Soap-powder, extract of soap, dry soap, and soft-soap, 20 per cent. *ad valorem.*
298. Spirits, methylated, 1s the liquid gallon.
299. Spirits, cleared from warehouse, methylated, under prescribed conditions, 6d. the liquid gallon.
300. Starch, 2d. the lb.
301. Tarpaulins, tents, rick- and wagon-covers, 20 per cent. *ad valorem.*
302. Twine n.o.e., 20 per cent. *ad valorem.*
303. Washing-powder, 20 per cent. *ad valorem.*
304. Wax, mineral, vegetable, and Japanese, 1½d. the lb.

In addition to any duty chargeable by law on any goods imported into the colony, a further duty of 20 per cent. *ad valorem* shall be charged when the goods are prison-made.

TABLE OF EXEMPTIONS FROM DUTIES OF CUSTOMS.

CLASS I.—FOODS, ETC.

Names of Articles.

305. Almonds, Barbary, Sicily, and French, used in confectioners' manufactures.
306. Anchovies, salted, in casks.
307. Arrowroot, sago, tapioca, macaroni, vermicelli, and prepared groats.
308. Salt.
309. Rice, dressed or undressed.
310. Rice manufactured into starch in bond.

CLASS IV.—NON-ALCOHOLIC BEVERAGES, ETC.

311. Cocoa-beans.
312. Coffee, raw.

CLASS V.—DRUGS, ETC.

313. Acids—viz.: boracic; carbolic, in bulk; fluoric; muriatic; nitric; oxalic; oleic; picric; pyrogallic; salicylic; sulphuric.

314. Concentrated extracts or essences in liquid form or preserved in fat for perfume-manufacturing purposes in manufacturing warehouses, in bottles of not less than 1 lb. in weight.
315. Disinfectants.
316. Drugs and chemicals—viz.: alum; sulphate of aluminium; sulphate of ammonia; anhydrous ammonia; aniline dyes; arsenic; bluestone, or sulphate of copper; borax; catechu; chloride of calcium; nitrate of silver; cochineal; creosote, crude or commercial; glycerine, crude; gum, arabic and tragacanth; gum benzoin; artificial gum arabic; gum damar; phosphorus; potash, caustic potash, and chlorate of potash; pearlash; prussiate of potash; cyanide of potassium; cyanide of sodium; liquid chlorine; sal-ammoniac; saltpetre; acetate of soda, crude; soda-ash; caustic soda; nitrate of soda; silicate of soda; sulphate of soda; sulphide of sodium; hyposulphite of sodium; strychnine; sulphur; chloride of zinc; iron-sulphates; gall-nuts; turmeric; saffron; nitrous-oxide gas; tree-washes; insecticides; maltine; chlorodyne.
317. Essential oils, except eucalyptus; cod-liver oil; oil of rhodium.
318. Horse-drenches.
319. Medicinal barks, leaves, herbs, flowers, roots and gums.
320. Scrub-exterminator.
321. Sheep-dip; sheep-drenches; sheep-licks.
322. Surgical and dental instruments and appliances.
323. Scientific and assay balances, retorts, flasks, and other appliances for chemical analysis and assay work.
324. Water-hardening chemicals for brewers' use.

Class VI.—Clothing and Textiles.

325. Accoutrements for military purposes, excepting uniform clothing.*
326. Brace-elastic and brace-mountings.
327. Bunting, in the piece.
328. Butter- and cheese-cloth.
329. Buttons, tapes, wadding, pins, needles.
330. Calico, white and grey, also cotton sheetings, in the piece.
331. Corduroy, moleskin, and plain beaver-skin, of cotton, in the piece.
332. Coloured cotton shirtings; flannelette shirtings.†
333. Forfar, dowlas, and flax sheeting, when cut up under supervision in sizes not exceeding 47 in. x 36 in. for making flour-bags, and not exceeding 54 in. for lining wool mats.
334. Fur-skins, green or sun-dried.
335. Gold or silver lace or braid for military clothing.
336. Hatmakers' materials—viz.: silk plush; felt hoods; shellac; galloons; calicoes; spale-boards for hat-boxes; leathers and linings; blocks; moulds; frames; ventilators; and tassels.
337. Hessians, plain or striped, and scrim.
338. Leather-cloth.
339. Minor articles (required in the making-up of apparel, boots, shoes, hats caps, saddlery, umbrellas, parasols, and sunshades), enumerated in any order of the Commissioner, and published in the *Gazette*.
340. Sailcloth, canvas, and unbleached double-warped duck, in the piece.
341. Sewing cottons, silks, and threads; crochet, darning, and knitting cottons; angola mendings not exceeding 45 yards, on cards.
342. Silk for flour-dressing.
343. Silk twist (shoemakers' and saddlers').

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* Subject to the provisions of section 28 of "The Defence Act, 1900," as follows:—

Equipments to be admitted free of Customs Duty.

28. All military clothing, saddlery, and equipments imported into the colony for the *bonâ fide* use of a Volunteer corps shall, on the certificate in writing of the Minister of Defence that the same are or have been imported for such purpose, be admitted into the colony free of Customs duty.

† See note on page 95.

344. Staymakers' binding, eyelets, corset-fasteners, jean, ticks, lasting, sateen, and cotell.
345. Tailors' trimmings—viz.: plain-coloured imitation hair-cloth; canvas; plain Verona and plain diagonal, and such patterns of checked Italian cloth as may be approved of by the Commissioner of Customs; Italian cloth of cotton or wool; buckram; wadding and padding; silk, worsted, and cotton bindings and braids; stay-bindings; Russia braids; shoulder-pads; buckles; silesias; drab, slate, and brown jeans; pocketings; slate, black, and brown dyed unions and linens.
346. Umbrella-makers' materials—viz.: reversible and levantine silk mixtures, gloria, and satin de chêne of not less than 44 in. in width; alpaca cloth, with border; zanella cloth, with border; also other piece-goods on such conditions as the Commissioner may approve; sticks, runners, notches, caps, ferrules, cups, ribs, stretchers, tips, and rings.
347. Union shirtings the invoice value of which does not exceed 6d. the yard.*
348. Waterproof material in the piece.

Class VII.—Leather, and Articles used in Leather Manufactures.

349. Boot elastic.
350. Bootmakers' linings, canvas, plain or coloured, bag and portmanteau linings, of such materials, qualities, and patterns as may be approved by the Commissioner.
351. Boots, shoes, and slippers—viz., children's, No. 0 to 3.
352. Cork soles, and sock soles.
353. East India kip, crust or rough-tanned, but undressed.
354. Goatskins, crust or rough-tanned, but undressed.
355. Grindery, except heel- and toe-plates.
356. Hogskins.
357. Kangaroo-, wallabi-skins, undressed.
358. Leather, japanned or enamelled; goatskins, dressed as morocco, coloured (other than black).
359. Saddle-trees.
360. Saddlers' ironmongery (except bits and stirrup-irons), hames, and mounts for harness; straining, surcingle, brace, girth, and roller webs; collar-check, and the same article plain, of such quality as may be approved by the Commissioner; legging-buckles.
361. Tanning materials, crude.

Class VIII.—Furniture, etc.

362. Blind-webbing and tape.
363. Upholsterers' webbing, hair-seating, imitation hair-seating; curled hair; gimp and cord of wool, cotton, or silk; tufts, and studs.

Class IX.—China, Glass, etc.

364. Bottles, empty, plain glass, not being cut or ground; also, jars up to 3 in. in diameter at the mouth.
365. Glass plates (engraved) for photo-lithographic work.
366. Jars or other dutiable vessels, containing free goods or goods subject to a fixed rate of duty, and being ordinary trade packages for the goods contained in them.

Class X.—Fancy Goods, etc.

367. Action-work and keys, in frames or otherwise, for manufacture of organs, harmoniums, and pianos; organ-pipes and stop-knobs.

* Whenever any dispute arises as to the application of the exemption in favour of coloured cotton, flannelette, or union shirtings, in the case of fabrics alleged to be such shirtings, the Commissioner has power to decide such dispute; and in case of doubt on his part, he may require the fabric in dispute to be cut up for shirt-making, under such conditions as he prescribes. (See section 6 of "The Customs and Excise Duties Act, 1895.")

368. Artists' canvas, colours, brushes, and palette-knives.
369. Magic-lanterns, lenses, and slides.
370. Microscopes and astronomical telescopes, and lenses for same.
371. Musical instruments, specially imported for Volunteer bands.
372. Paintings, statuary, and works of art, presented to or imported by any public institution or art association registered as a body corporate, for display in the buildings of such institution or association, and not to be sold or otherwise disposed of.
373. Photographic cameras and lenses.
374. Photographs of personal friends in letters or packets.
375. Precious stones, cut or uncut and unmounted.
376. Sensitized surfaces for photographic purposes.

Class XI.—Paper, etc.

377. Bookbinders' materials—viz., cloth, leather, thread, headbands, webbing, end-papers, tacketing-gut, marbling-colours, marble-paper, blue paste for ruling-ink, staple presses, wire-staples, staple-sticks.
378. Butter-paper, known as parchment paper or waxed paper.
379. Cardboard and pasteboard, of sizes not less than that known as "royal."
380. Cardboard boxes, material for—viz., gold and silver paper, plain and embossed, gelatine and coloured papers, known as "box-papers."
381. Cartridge-paper for drawing-books.
382. Cloth-lined boards, not less than "royal."
383. Cloth-lined papers, enamelled paper; ivorite and gelatine; metallic paper; not less than "demy."
384. Copy-books and drawing-books.
385. Copying-paper, medium and double-foolscap, in original mill wrappers and labels.
386. Hand-made cheque-paper.
387. Ink, printing.
388. Masticated para.
389. Millboard, and bookbinders' leather-board.
390. Paper, hand-made or machine-made book or writing, of sizes not less than the size known as "demy," when in original wrappers.
391. Printing-paper.
392. Printed books, papers, and music, n.o.e.
393. School slates, and educational apparatus.

Class XII.—Metals.

394. All machinery for agricultural purposes, including chaff-cutters, corn-crushers; corn-shellers, also articles used in manufacturing the same—viz., chaff-cutting knives, tilt-rakes, fittings for threshing-mills, forgings for ploughs.
395. All agricultural implements.
396. All bolts and nuts, blank or screwed nuts, black or finished nuts.
397. Anchors.
398. Artificers' tools.
399. Axes and hatchets; spades, shovels, and forks; picks; mattocks; quartz and knapping-hammers; scythes, sheep-shears, reaping-hooks; soldering-irons; paperhangers' scissors; butchers' saws and cleavers.
400. Axles, axle-arms, and boxes.
401. Band-saws and folding-saws, including frames.
402. Bellows-nails.
403. Bicycles and tricycles, fittings for—viz., rubber-tires, pneumatic-tires, outside covers, and inner tubes; rubber and cork handles, and pedal-rubbers; also drop-forgings and stampings, ball-bearings, weldless steel tube in full lengths, rims, forks, and spokes, in the rough.
404. Blacksmiths' anvils, forges, and fans.

405. Blowers.
406. Brass and copper, in pigs, bars, tubes, or sheets.
407. Brass tubing and stamped work, in the rough, for gasaliers and brackets.
408. Caps, percussion.
409. Card-clothing for woollen-mills.
410. Chain pulleys, and chains for same.
411. Chains, trace and plough chains; or metal articles required to repair or complete riding or driving harness or saddlery to be repaired or made in the colony.
412. Chamfering, crozing and howelling machine for cask-making.
413. Copper and composition, rod, bolts, sheathing, and nails.
414. Couch-roll jackets, machine-wires, beater-bars, and strainer-plates for paper-mills.
415. Crucibles.
416. Emery-grinding machines and emery-wheels.
417. Empty iron drums, not exceeding 10 gallons capacity.
418. Engineers', boilermakers', brass-finishers', smiths', and all metal- and wood-workers' machine and hand tools.
419. Engine governors.
420. Eyelets.
421. Fire-engines, including Merryweather's chemical fire-engines.
422. Fish-hooks.
423. Galvanising-baths, welded.
424. Gas-engines and hammers, and oil-engines.
425. Glassmakers' moulds.
426. Hydraulic cranes.
427. Iron- and brass-wove wire and wire gauze; also wire netting.
428. Iron boiler-plates and unflanged end-plates for boilers; boiler-tubes not exceeding 6 in. in diameter, and unflanged; Bowling's expansion rings; furnace-flues.
429. Iron, plain black sheet, rod, bolt, bar, plate, hoop, and pig.
430. Iron rolled girders.
431. Iron plates, screws, and castings for ships.
432. Iron wire n.o.e., including fencing-wire, plain and barbed.
433. Lead, in pigs and bars.
434. Locomotives.
435. Machine saws.
436. Machinery exclusively for the purpose of the manufacture of beet-root sugar.
437. Machinery for dairying purposes.
438. Machinery of every description for mining purposes, including machine pumps, but not including machinery for dredging.
439. Machinery for gold-saving purposes and processes.
440. Metal fittings for trunks, portmanteaux, travelling-bags, leggings, bags, and satchels.
441. Metal sheaves for blocks.
442. Metallic capsules.
443. Perambulators and the like vehicles, fittings for, n.o.e.
444. Perforated or cellular sheet zinc or iron.
445. Portable engines on four or any greater number of wheels, with boiler of locomotive type; also traction-engines.
446. Printing type and materials n.o.e.
447. Rails for railways and tramways.
448. Reapers and binders, and reaping and mowing machines, and extra parts for same; materials for manufacturing agricultural machinery, namely, reaper-knife sections, fingers, brass and steel springs, malleable castings, discs for harrows, mould-boards and plough-shares, mould-board plates, and steel-share plates cut to pattern, skeith-plates; ploughs and harrows; combined threshers.
449. Riddles and sieves.
450. Rivets and washers.

451. Separators and coolers for dairying purposes.
452. Set-screws, engineers' studs, and split-pins.
453. Sewing-, knitting-, and kilting-machines.
454. Spiral springs (except sofa- and mattress-springs).
455. Steam and hydraulic pressure and vacuum gauges.
456. Steel rams, black or finished, for hydraulic cranes or jiggers.
457. Surveyors' steel bands and measuring-tapes.
458. Swords.
459. Tacks of all kinds.
460. Tea-packing lead.
461. Tin, in pigs, bars, or sheets.
462. Tinsmiths' fittings, including stamped or blocked tin, planished or unplanished.
463. Tins, tops of, ornamented.
464. Welded and flanged boiler-furnaces, plain or corrugated.
465. Wire, of brass, copper, or lead.
466. Zinc, plain sheet.
467. Zinc plates and copper plates for photo-lithographic work.

Class XIII.—Timber, etc.

468. Ash, hickory, and lancewood timber, unwrought.
469. Blacksmiths' bellows.
470. Brush woodware.
471. Carriage- and cart-shafts, spokes and felloes in the rough; hubs, of all kinds; poles if unbent and unplaned, of all kinds; bent wheel-rims.
472. Carriage- and cart-makers' materials—viz.: springs, mountings, trimmings, brass hinges, tire-bolts, shackle-holders, step treads, and other iron fittings (except steps, lamp-irons, dash-irons, seat-rails, and fifth wheels), rubber-cloth.
473. Churns.
474. Lignum-vitæ.
475. Sieves, hair.
476. Wooden handles for tools.

Class XIV.—Oils, etc.

477. Benzine in bulk.
478. Oils—viz.: candlenut, fish, kerosene, penguin, palm, seal, whale.
479. Paints and colours n.o.e.
480. Shale oil, once run, suitable for gas-making.
481. Spirits of tar.
482. Turpentine, driers, and terebene.

Class XV.—Miscellaneous.

483. Apparatus and appliances solely for teaching purposes, as may be approved by the Commissioner.
484. Bags made of New Zealand tow or flax.
485. Belting for machinery, other than leather.
486. Binder-twine.
487. Bricks, other than fire-bricks.
488. Building materials n.o.e.
489. Brushes for cream-separators and combined screens.
490. Candlenuts and candlenut kernels.
491. Candle-wick.
492. Canvas aprons and elevators for reapers and binders.
493. Carpenters' baskets.
494. Charts and maps.
495. Confectioners' moulding-starch.
496. Cotton waste.

497. Dye-stuffs and dyeing materials, crude.
498. Felt sheathing.
499. Food preservative n.o.e.
500. Gum boots.
501. Hawsers of 12 in. and over.
502. Honey and brown Windsor soap composition.
503. Iron and steel cordage.
504. Jute bagging, bags, and sacks.
505. Manures.
506. Marble, and other stone, hewn or rough sawn, not dressed or polished.
507. Netmakers' cotton twine.
508. Official supplies for consular officers of countries where a similar exemption exists in favour of British Consuls.
509. Papermakers' felts.
510. Passengers' baggage and effects, including only wearing-apparel and other personal effects that have been worn or are in use by persons arriving in the colony; also implements, instruments, and tools of trade, occupation, or employment of such persons; and household or other effects not exceeding £100 in value, which have been in use for twelve months prior to embarkation by the persons or families bringing them to the colony, and not intended for any other person or persons or for sale *; also cabin-furnishings belonging to such persons.
511. Plaster of Paris.
512. Powder, blasting and meal.
513. Ship-chandlery n.o.e.
514. Ships' rockets, blue-lights, and danger-signals.
515. Stones, mill- grind- oil- and whet-.
516. Tobacco for sheepwash or for insecticide, after being rendered unfit for human consumption to the satisfaction of the Commissioner.
517. Treacle or molasses, mixed with bone-black in proportions to the satisfaction of the Commissioner.
518. Tubular woven cotton-cloth in the piece, for meat wraps.
519. Type-writers.
520. Wax, bottling.
521. Woolpacks and woolpockets.
522. Yarn—viz.: coir, flax, hemp.
523. Articles and materials (as may from time to time be specified by the Commissioner) which are suited only for, and are to be used solely in, the fabrication of goods within the colony. All decisions of the Commissioner in reference to articles so admitted free to be published from time to time in the *Gazette*.
524. And all articles not otherwise enumerated.

Table of Excise Duties.

525. Tobacco, 1s. the lb.†
526. Cigars, cigarettes, and snuff, 1s. 6d. the lb.†
527. Beer, 8d. the gallon.

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* Including bicycles which have been in use for twelve months.

† "The Tobacco Excise Duties Act, 1896," section 2, enacts:—

"On and after the thirty-first day of December, one thousand eight hundred and ninety-six, section three of 'The Customs and Excise Duties Act, 1891,' shall be deemed to be repealed, and in lieu of the duties imposed by that section there shall be levied, collected, and paid, on and after that day, upon tobacco manufactured in the colony, at the time of making the entry for home consumption thereof, the several duties of excise following, that is to say—

On tobacco	One shilling the pound.
On cigars and snuff	One shilling and sixpence the poun
On cigarettes—	
If manufactured by machinery	Two shillings and sixpence the pound.
If made by hand	One shilling the pound."

528. Articles in which spirit is a necessary ingredient, manufactured in a warehouse appointed under section 26 of "The Customs Laws Consolidation Act, 1882," namely—
Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing more than 50 per cent. of proof spirit, 9d. the lb.
Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing less than 50 per cent. of proof spirit, 3d. the lb.
Culinary and flavouring essences, 12s. the liquid gallon, from 1st February, 1896.
Perfumed spirit, 20s. the liquid gallon, from 1st February, 1896.
Toilet preparations which are subject to 16s. the liquid gallon on importation, 12s. the liquid gallon.
Toilet preparations which are subject to 25 per cent. duty on importation, 6s. the liquid gallon.

Duties imposed by His Excellency the Governor under Section 17 of "The Customs and Excise Duties Act, 1888."

529. Olive stones, ground (see *New Zealand Gazette*, 15th May, 1890), 4d. the lb.
530. Brewers' caramel (see *New Zealand Gazette*, 21st August, 1890), 3d. the lb.
531. Liquid hops (see *New Zealand Gazette*, 21st December, 1893), 6s. the lb.
532. The United Asbestos Patent Salamander Decorations (see *New Zealand Gazette*, 14th May, 1896), 15 per cent. *ad valorem*.
533. Matches of any material other than wood or wax, a duty corresponding to the duty payable on wooden matches (see *New Zealand Gazette*, 27th April, 1899).
534. Fibre conduit pipes and fittings for same (see *New Zealand Gazette*, 4th May, 1899), 5 per cent. *ad valorem*.
535. Caramel cereal (see *New Zealand Gazette*, 14th March, 1901), ½d. the lb.
536. Compo-board (see *New Zealand Gazette*, 12th December, 1901), 4s. the 100 ft. super.

The "Opium Prohibition Act, 1901," makes it unlawful for any person to import opium into the colony in any form suitable for smoking. Permits may be issued by the Commissioner of Trade and Customs for the importation of the drug in the following forms:—

Opium, crude.
Opium, in powder.
Opium, extract of, solid.

No permit shall be issued to any person of the Chinese race. Heavy penalties are prescribed for breaches of the above law.

"The Opium Prohibition Act Amendment Act, 1902," makes it illegal to have opium in possession, except the kinds stated above, which can be held under permit.

"The Timber Export Act, 1901," authorised the collection, by Order in Council, of the following duties:—

SCHEDULE.

Logs, round	3s. per 100 superficial feet.	Or such lesser duty as the Governor by Order in Council determines.
Logs, squared with axe or saw..		
Half logs		
Flitches of any particular kind, or pieces of such size as the Governor by Order in Council from time to time determines	3s. per 100 superficial feet	Or such lesser duty as the Governor by Order in Council determines.

An Order in Council dated the 27th March, 1902, directs that there shall be levied, collected, and paid previous to exportation from New Zealand, duties upon white pine and kahikatea timber as under :—

Logs, round	3s. per 100 superficial feet.
Logs, cut in half	" "
Logs, squared with axe or saw, 10 in. by 10 in. or its equivalent, or over	" "
Flitches, any width, and not exceeding 10 in. thick,	2s. per 100 superficial feet.

A further Order in Council, dated 10th April, 1902, directs that duties on kauri timber shall be charged as under :—

Logs, round	3s. per 100 superficial feet.
Logs, cut in half	" "
Logs, squared with axe or saw..	" "
Flitches, exceeding 30 in. in width and 9 in. in thickness	2s. per 100 superficial feet.

FEES PAYABLE UNDER LAND TRANSFER ACT.

FEES PAYABLE TO DISTRICT LAND REGISTRARS UNDER "THE LAND TRANSFER ACT, 1885."

	£	s.	d.
For the bringing land under the provisions of this Act (over and above the cost of advertisements)—			
When the title consists of a Crown grant, and none of the land included therein has been dealt with	0	2	0
When the title is of any other description and the value exceeds £300	1	0	0
When the title is of any other description and the value exceeds £200 and does not exceed £300	0	15	0
When the title is of any other description and the value exceeds £100 and does not exceed £200	0	10	0
When the title is of any other description and when the value does not exceed £100	0	5	0
Contribution to the Assurance Fund upon first bringing land under the Act,—			
In the pound sterling	0	0	0½
Other fees—			
For every application to bring land under the Act	0	5	0
For every certificate of title on transfer where the consideration does not exceed £100	0	10	0
For every other certificate of title	1	0	0
Registering memorandum of transfer, mortgage, incumbrance, or lease	0	10	0
Registering transfer or discharge of mortgage or of incumbrance, or the transfer or surrender of a lease	0	5	0
Registering proprietor of any estate or interest derived by settlement or transmission	0	10	0
For every power of attorney deposited	0	10	0
For every registration abstract	1	0	0
For cancelling registration abstract	0	5	0
For every revocation order	0	10	0
Noting caveat	0	10	0
Cancelling or withdrawal of caveat, and for every notice relating to any caveat	0	5	0
For every search	0	2	0
For every general search	0	5	0

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Other fees—*continued.*	£	s.	d.
For every map or plan deposited	0	5	0
For every instrument declaratory of trusts, and for every will or other instrument deposited	0	10	0
For registering recovery by proceeding in law or equity or re-entry by lessee	0	10	0
For registering vesting of lease in mortgagee, consequent on refusal of Trustee in Bankruptcy to accept the same	0	10	0
For entering notice of marriage or death	0	10	0
For entering notice of writ or order of Supreme Court	0	10	0
Taking affidavit or statutory declaration	0	5	0
For the exhibition of any deposited instrument, or for exhibiting deeds surrendered by applicant proprietor	0	5	0
For certified copy, not exceeding five folios	0	5	0
For every folio or part folio after first five	0	0	6
For every notice to produce deeds or instruments	0	5	0
For every outstanding interest noted on certificate of title	0	5	0
When any instrument purports to deal with land included in more than one grant or certificate, for each registration memorial after the first	0	2	0

Regulations.

All fees under the Act shall be due and payable in advance.

Where several properties are included in one form of application, there shall be charged in respect of each property an application fee, and a fee for bringing the land under the Act. Land included within one outer boundary shall be deemed one property for the purpose of this regulation.

In all cases a fee of one pound (£1) is hereby prescribed as the charge to be made for advertising notice of application; provided that, whenever it is necessary that unusual publicity shall be given to any application, the District Land Registrar may require payment of such additional sum as shall, in his judgment, be sufficient to defray the cost of such advertisements.

In all cases where application is made to bring land under the Act, and the certificate of title is directed to issue and is issued in the name of the applicant, the fees for bringing such land under the Act, with the exception of the "application fee," may, at the request of the applicant, remain unpaid until such land is dealt with by him as registered proprietor. The District Land Registrar shall retain any such certificate of title until the fees due upon the same have been paid, and, until such payment, shall not register any dealing with the land included in such certificate of title.

Printed forms supplied by the Registrar for use under the Act shall be charged for at the rate of one shilling each. Solicitors, land-brokers, and others having forms printed for their own use, and at their own expense, shall, on approval of such forms by the Registrar, be entitled to have the same sealed free of charge.

PART II.—STATISTICAL.

SECTION I.—POPULATION.

THE population of New Zealand, as estimated for the 31st December, 1902, with the increase for the year, is shown below :—

	Persons.	Males.	Females.
Estimated population, exclusive of Maoris (also Cook and other annexed Islands), on 31st December, 1901	787,657	414,223	373,434
Increase during the year 1902 :—			
By excess of births over deaths	12,280	5,763	6,517
Excess of arrivals over departures	7,992	5,922	2,070
Estimated population (exclusive of Maoris, also Cook and other annexed Islands), on 31st December, 1902	807,929	425,908	382,021
Maori population, census, 1901	43,143	23,112	20,031
Population of Cook and other Pacific Islands ..	12,292	6,369	5,923
Total estimated population of colony (including Maoris, also Cook and other Islands) on 31st December, 1902	863,364	455,389	407,975

The number of the Chinese in New Zealand at the end of the year 1902 was estimated to be 2,792 persons, of whom 31 were females.

Details showing the distribution of the Maori population and also of the Cook and other annexed Pacific Islands follow; but the figures in the succeeding portions of this section exclude these special features.

TOTAL NUMBER OF MAORIS IN EACH COUNTY.

[Further particulars as to sex, age, &c., will be found in the section specially dealing with the Native population.]

Counties.	Persons.	Counties.	Persons.
Mongonui	2,093	Ohinemuri	630
Whangaroa	743	Piako	409
Hokianga	2,330	Waikato	983
Bay of Islands	2,235	Waipa	226
Hobson	984	Raglan	1,499
Whangarei	739	Kawhia	1,649
Otamatea	186	West Taupo	1,130
Rodney	173	East Taupo	651
Waitemata	171	Rotorua	971
Eden	223	Tauranga	1,301
Great Barrier Island ..	37	Whakatane	3,170
Waiheke Island	70	Waiapu	2,474
Manukau	734	Cook	1,803
Coromandel	565	Clifton	420
Thames	774	Taranaki	1,020

TOTAL NUMBER OF MAORIS IN EACH COUNTY—*continued.*

Counties.	Persons.	Counties.	Persons.
Stratford	43	Kaikoura	78
Hawera	853	Collingwood	22
Patea	274	Waimea	107
Wanganui	1,689	Buller	23
Rangitikei	459	Westland	60
Oroua	433	Ashley	188
Pohangina	3	Selwyn	56
Manawatu	252	Akaroa	293
Horowhenua	1,035	Levels and Geraldine ..	134
Wairoa	1,991	Waimate	65
Hawke's Bay	1,605	Waitaki	117
Waipawa	403	Waikouaiti	168
Patangata	181	Peninsula	92
Pahiatua	24	Taieri	42
Wairarapa North ..	337	Clutha	22
Wairarapa South ..	476	Southland	2
Hutt	264	Wallace	98
Sounds	263	Stewart Island	112
Marlborough	79	Chatham Islands	211

POPULATION OF COOK AND OTHER PACIFIC ISLANDS RECENTLY INCLUDED WITHIN THE BOUNDARIES OF THE COLONY.

	Persons.
Rarotonga*	2,060[a]
Mangaia	1,541
Atiu*	918[b]
Aitutaki*	1,170[c]
Mauke (or Parry Island)	370
Mitiaro	165
Hervey Islands	10
Total Cook group	6,234
Niue (or Savage Island)*	4,079[d]
Palmerston*	115[e]
Penrhyn (or Tongareva)*	445[f]
Manahiki*	484[g]
Rakaanga	400
Danger (or Pukapuka)	505
Suwarrow	30
Total other Islands	6,058
Total population of Islands included within the extended boundaries of the colony ..	12,292

* Results of census taken this year (1902).

(a) Birthplaces.—Rarotonga, 1,517; Mangaia, 206; Aitutaki, 58; Mauke, 16: Atiu, 37; Mitiaro, 11; Society Islands, 73; other Pacific Islands, 58; United Kingdom, 30; America, 11: New Zealand, 21; China, 7; Germany, 5: Portugal, 5; Australia, 3; Jamaica, 1; New Guinea, 1.

(b) Birthplaces.—Atiu, 913; Rarotonga, 3; Austria, 1; China, 1.

(c) Not including 149 natives absent in ships or at the guano islands.

(d) Whites and half-castes living as whites, 28 persons; absent in ships or at Tonga, 418 persons.

(e) Birthplaces.—Palmerston atoll, 100; Manahiki, 10; Penrhyn, 3; Pukapuka, 1; Society Islands, 1.

(f) Birthplaces.—Penrhyn, 342; Cook Islands, 25; Society Islands, 61; Arorai, 2; United Kingdom, 8; other places, 4.

(g) Birthplaces.—Manahiki, 469; Pukapuka, 11; Society Islands, 2; England, 2.

Increase of Population (exclusive of Maoris and Annexed Pacific Islands).

The increase for each quarter of the year 1902 was :—

First Quarter.

Increase from:	Total.	Males.	Females.
Excess of births over deaths	3,164	1,484	1,680
Excess of departures over arrivals (decrease) ..	−825	−1,044	219
	2,339	440	1,899

Second Quarter.

Excess of births over deaths	3,150	1,473	1,677
Excess of departures over arrivals (decrease) ..	−1,615	−1,080	−535
	1,535	393	1,142

Third Quarter.

Increase from:	Total.	Males.	Females.
Excess of births over deaths	2,823	1,299	1,524
Excess of arrivals over departures	3,758	3,347	411
	6,581	4,646	1,935

Fourth Quarter.

Excess of births over deaths	3,143	1,507	1,636
Excess of arrivals over departures	6,674	4,699	1,975
	9,817	6,206	3,611

Year 1902.

Excess of births over deaths	12,280	5,763	6,517
Excess of arrivals over departures	7,992	5,922	2,070
	20,272	11,685	8,587

The movement of population since 1885 is given next. Although the large increase in 1893 by excess of arrivals over departures was not maintained during the nine following years, the arrivals in the colony nevertheless exceeded the departures in each of these years, and the total excess of arrivals for the ten-year period 1893–1902 inclusive is found to be 38,712 persons, drawn from other states, colonies, or countries. The number may be somewhat greater than the actual fact, but probably not very much so. Reference to the possible source of error and its degree will be found further on.

Year.	Estimated Population on the 31st December.	Increase during the Year			Centesimal Increase on Population of Previous Year.
		By Excess of Births over Deaths.	By Excess of Arrivals over Departures.*	Net Increase.	
1885	575,172	13,612	– 2,744†	10,868	1·93
1886	589,386	13,164			
1887	603,361	12,998			
1888	607,380	13,194			
1889	616,052	12,685	– 17,194†	58,886	10·24
1890	625,508	12,284			
1891	634,058	11,755			
1892	650,433	11,417	4,958	16,375	2·58
1893	672,265	11,420	10,412	21,832	3·36
1894	686,128	11,610	2,253	13,863	2·06
1895	698,706	11,683	895	12,578	1·83
1896	714,162	12,180	1,472	13,652	1·95
1897	729,056	12,142	2,752	14,894	2·09
1898	743,463	11,711	2,696	14,407	1·98
1899	756,505	11,155	1,887	13,042	1·75
1900	768,278	12,346	1,831	14,177	1·87
1901	787,657	12,857	6,522	19,379	2·52
1902	807,929	12,280	7,992	20,272	2·57

*Corrected where necessary in accordance with census results. The amount of loss by departures in the period 1886-91, though correct in the aggregate, cannot be allocated with exactness to the respective years. †Loss.

Arrivals and Departures.

The number of persons who arrived in the colony in the year 1902 was 30,293, an increase of 5,207 on the number for the previous year. Of the arrivals in 1902, 27,435 persons were classified as adults, being above the age of twelve years, and 2,858 as children. The total number of males was 21,522 and of females 8,771. The arrivals from the United Kingdom numbered 3,474, and from Australia 22,526. Besides these, 679 persons came from Fiji, and 3,614 from the South Seas and other ports, including arrivals by mail-steamers from San Francisco.

Classified in respect of birthplace, it is found that 10,283 of the arrivals were persons born in Australasia, 18,903 in the United Kingdom, and 38 in other British possessions. Of 1,069 persons born in foreign countries who arrived during 1902, 255 were born in Germany, 120 in Austria, 112 in France, 170 in the United States, 74 in Denmark, 41 in Sweden, 31 in Norway, 57 in Greece, 48 in Italy, 29 in Switzerland, 11 in Russia, 11 in Bavaria, 2 in Belgium, 1 in Spain, and 107 in other countries (China, Japan, Pacific Islands, Syria, Persia, and Asia Minor).

Among the arrivals in 1902 are noticed 102 "race-aliens," or persons of other than European descent. Particulars of birthplace and sex are as under:—

Birthplace.	M.	F.	Total.
Asia Minor	1	5	6
China	69	0	69
Syria	4	0	4
Persia	1	0	1
Pacific Islands	9	3	12
Fiji	1	0	1
India	2	1	3
Japan	4	0	4
New Zealand	2	0	2
Total	93	9	102

The practice of nominating immigrants to be brought out partly at the Government expense has been discontinued since the 16th December, 1890, and there was no free immigration in the year 1902. Certain reductions are, however, arranged by the Agent-General with the shipping companies in fares for men with moderate means who intend to take up land and settle in the colony.

Only 69 Chinese (all men) arrived in the colony during 1902, but 87 (all men) left, the departures thus exceeding the arrivals by 18.

The total departures in 1902 were 22,301 persons, being 3,737 more than in 1901. Thus, the movement of population both to and from the colony is found to have been greater than in the previous year.

The departures from the colony by the Union Steamship Company's boats, as given through the Customs Department, are checked by special returns kindly furnished by the pursers of the steamers, and, where persons who did not book their passages have been omitted, the necessary additions are made. The pursers' returns also serve to prevent the occasional omission of the full number of persons leaving by any one vessel, which sometimes had happened previous to the introduction of this check. Unless more passengers are at any time of great pressure taken away from New Zealand than can lawfully be carried, the returns of outgo of population should prove fairly correct, and indeed the last census shows that the estimated population even after five years' interval was a very close approximation to the truth.

Of the departures in 1902, 20,721 persons were over twelve years of age, and 1,580 children. More than twice as many males left the colony as females, the numbers being 15,600 and 6,701 respectively. The departures to the United Kingdom amounted to 1,497 persons, and those to Australia numbered 15,670. Besides these, 610 persons left for Fiji, and 4,524 for other ports (including passengers for San Francisco).

In 1891 the colony lost population by excess of departures over arrivals, but in each of the years 1892 to 1902, inclusive, New Zealand has drawn to itself more population than it has parted with, notwithstanding the attractions of Australian and other gold-fields.

Census, 1901.

The population of the colony (exclusive of Maoris), as returned in the census schedules for the night of the 31st March, 1901, was 772,719 persons, of whom 2,857 were Chinese, and 2,407 half-castes living amongst and as Europeans.

A census of the Maori population was taken during February of 1901, when, according to returns made by the enumerators, the number of the Native race was found to be 43,143 persons, including 3,133 half-castes living as Maoris. 196 Maori women were returned as married to European husbands. The complete population (European and Maori) of the colony was therefore 815,862 persons, as exhibited in the following statement, specifying the numbers for each sex :—

	Persons.	Males.	Females.
Population (exclusive of persons of the aboriginal native race, of mixed European and Native blood, and Chinese)	767,455	401,979	365,476
Half-castes and persons of mixed race living as and among Europeans	2,407	1,188	1,219
Chinese	2,857	2,825	32
Aboriginal natives (including 196 Maori wives of Europeans)	40,010	21,418	18,592
Half-castes and persons of mixed race living among and as members of Maori tribes ..	3,133	1,694	1,439
Total population on 31st March, 1901	*815,862	429,104	386,758

The total half-caste or mixed European and Native population was 5,540 persons. The number of half-castes living among Europeans increased since 1896 by 148, or at the rate of 6·55 per cent. In that year the number of Maori wives of Europeans was 229; in 1901 it was 196. The Chinese decreased from 3,711 at the time of the census of 1896 to 2,857 in March, 1901; or at the rate of 23·01 per cent., caused mainly by the excess of departures over arrivals.

The Maori population fell from 41,993 in 1891 to 39,854 in 1896, and increased to 43,143 in 1901, according to the returns.

The increase on the total European population between April, 1896, and 31st March, 1901, amounted to 69,359 persons, or a rate of

* Not including 352 persons, officers and crews of two British men-of-war.

9·86 per cent. Between the census of 1891 and that of 1896 the numerical increase was 76,702 persons, or 12·24 per cent. The average annual increase in the period 1896–1901 was at the rate of 1·90 per cent.

The population of the principal divisions of the colony on 31st March, 1901, was—

	Persons.	Males.	Females.
North Island and adjacent islets (exclusive of Maoris)	390,571	206,606	183,965
Middle Island and adjacent islets (exclusive of Maoris)	381,661	199,103	182,558
Stewart Island	272	166	106
Chatham Islands (exclusive of Maoris) ..	207	112	95
Kermadec Islands	8	5	3
Total for the colony (exclusive of Maoris)	772,719	405,992	366,727

Proportion of the Sexes and Density of Population.

The gradual equalization of the numbers of the sexes and growing density of population and dwellings in the colony are alluded to in a further table.

Date of Enumeration.	Number of Females to 100 Males.	Number of Persons to a Square Mile.	Number of Persons to an Inhabited Dwelling.	Number of Inhabited Dwellings to a Square Mile.
December, 1861	62·16	0·944	4·42	0·214
February, 1871	70·52	2·456	4·48	0·548
April, 1881 ..	81·72	4·693	5·12	0·917
April, 1891 ..	88·26	6·024	5·06	1·191
March, 1901 ..	90·33	7·427	4·86	1·527

Increase of Population at Successive Censuses.

The increase of population of European descent at successive census periods has been :—

Date of Enumeration.	Population. Persons.	Numerical Increase. Persons.	Centesimal Increase.
December, 1858 ..	59,413		
		39,608	39·99
„ 1861 ..	99,021		
		73,137	73·86
„ 1864 ..	172,158		
		46,510	27·01
„ 1867 ..	218,668		
		37,725	17·25
February, 1871 ..	256,393		
		43,121	16·82
March, 1874 ..	299,514		
		114,898	38·36
„ 1878 ..	414,412		
		75,521	18·22

Date of Enumeration.	Population. Persons.	Numerical Increase. Persons.	Centesimal Increase.
April, 1881 ..	489,933		
		88,549	18·07
March, 1886 ..	578,482		
		48,176	8·33
April, 1891 ..	626,658		
		76,702	12·24
" 1896 ..	703,360		
		69,359	9·86
March, 1901 ..	772,719		

Populations of Provincial Districts.

These are stated as in March, 1901, and at the previous census. Taranaki stands first for rate of progress with an increase of 21·42 per cent. in five years, Wellington comes next with 16 per cent., Auckland third with 14·57, Marlborough and Nelson have increased from 6 to 7 per cent., Canterbury and Otago somewhat over 5 per cent.

Provincial Districts.	Population, April, 1896.	Population, March, 1901.	Increase.	
			Numerical.	Centesimal.
	Persons.	Persons.	Persons.	
Auckland	153,564	175,938	22,374	14·57
Taranaki	31,175	37,855	6,680	21·42
Hawke's Bay ..	34,038	35,424	1,386	4·07
Wellington ..	121,854	141,354	19,500	16·00
Marlborough ..	12,483	13,326	843	6·75
Nelson	35,734	37,915	2,181	6·10
Westland	14,469	14,506	37	0·26
Canterbury ..	135,858	143,041	7,183	5·29
Otago	163,944	173,145	9,201	5·61
Chatham Islands	234	207	−27	−11·54
Kermadec Islands	7	8	1	14·28
Totals ..	703,360	772,719	69,359	9·86

(−) Decrease.

Population of Counties and Boroughs.

New Zealand is, by "The Counties Act, 1876," divided into counties and boroughs, excepting certain outlying islands, which are not within county boundaries. It is provided by the above-mentioned Act that boroughs shall not be included in counties. In March, 1901, the number of the counties was 86. Of these, the North Island had 52, with a population amounting altogether to 216,725 persons. The Middle Island had 33 counties, the population being 200,618 persons. Stewart Island is a county in itself, and had a population of 253 persons, exclusive of persons on shipboard. The names and populations of the various counties in the colony, with their interior boroughs set opposite, were as under at the date of the enumeration:—

Counties.	Census, 1901.	Boroughs.	Census, 1901.
Mongonui	2,274		
On shipboard	18		
Whangaroa	927		
*Hokianga	1,767		
On shipboard	22		
Bay of Islands	2,587		
On shipboard	26		
Hobson	4,813		
On shipboard	163		
Whangarei	6,380	Whangarei	1,429
On shipboard	31		
Otamatea	2,721		
Rodney	3,678		
On shipboard	17		
Waitemata	7,035	Birkenhead	1,057
On shipboard	27	Devonport	3,823
		On shipboard	1
Eden	19,314	Grey Lynn	4,110
		Auckland	34,213
		On shipboard	874
		Parnell	4,566
		Newmarket	2,060
		Onehunga	3,015
		On shipboard	47
Manukau	12,306		
Coromandel	4,169		
On shipboard	14		
Thames	5,043	Thames	4,009
On shipboard	8	On shipboard	11
*Ohinemuri	9,978		
On shipboard	50		
Piako	2,436	Te Aroha	888
Waikato	3,183	Hamilton	1,253
Waipa	3,580	Cambridge	989
Raglan	1,697		
Kawhia	1,113		
On shipboard	1		
West Taupo	287		
East Taupo	256		
Rotorua	1,307		
Tauranga	1,720	Tauranga	945
		On shipboard	1
Whakatane	779		
Opotiki	1,438		
On shipboard	5		
Waiapu	711		
Cook	6,393	Gisborne	2,737
		On shipboard	58
Wairoa	1,773		
Hawke's Bay	6,833	Napier	8,774
		On shipboard	241
		Hastings	3,650
Clifton	2,535		
†Taranaki	11,194	New Plymouth	4,405
On shipboard	92		
Stratford	5,081	Stratford	2,027
†Hawera	8,347	Hawera	2,131
Patea	3,046	Patea	691
Waitotara	3,476	Wanganui	7,329
		On shipboard	5
Wanganui	4,018		
Rangitikei	7,570	Marton	1,101
Kiwitea	2,844		
‡Oroua	6,778	Feilding	2,298
		Palmerston North	6,534
Pohangina	1,536		
Manawatu	3,000	Foxton	1,211
Horowhenua	4,654		
§Waipawa	9,495	Dannevirke	2,315
		Woodville	926
Patangata	2,376		

* Since reduced by creation of Waihi Borough. † Since reduced by creation of Egmont County, and Inglewood and Eltham Boroughs. ‡ Since reduced by creation of Kairanga County. § Since reduced by creation of Woodville County.

Counties.	Census, 1901.
Pahiatua	3,600
*Akitio	1,048
*Castlepoint	457
*Eketahuna	2,332
*Mauriceville	1,127
*Masterton	3,123
†South Wairarapa	5,419
Hutt	7,171
Sounds	946
On shipboard	2
Marlborough	6,518
Kaikoura	1,765
Collingwood	2,490
On shipboard	23
Waimea	7,833
On shipboard	3
Buller	4,868
On shipboard	4
Inangahua	4,595
Grey	4,971
Westland	4,405
Amuri	1,142
Cheviot	1,120
*Ashley	11,599
*Selwyn	30,787
‡Akaroa	3,669
Ashburton	11,342
Geraldine	5,991
Levels	5,496
Mackenzie	1,642
Waimate	5,653
Waitaki...	9,086
Waihemo	2,014
Waikouaiti	4,082

Boroughs.	Census, 1901.
Pahiatua	1,209
Masterton	3,949
Carterton	1,205
Greytown	1,122
Wellington	43,638
On shipboard	333
Onslow	1,499
§Melrose	2,995
Petone	3,780
Lower Hutt	1,822
Karori	1,212
Blenheim	3,222
Picton	875
On shipboard	95
Motueka...	886
Richmond	543
Nelson	7,010
On shipboard	157
Westport	2,922
On shipboard...	236
Brunner	1,572
Greymouth	3,748
On shipboard	89
Hokitika...	1,946
On shipboard...	5
Kumara	1,121
Ross	614
Kaiapoi	1,795
Rangiora	1,768
Lyttelton	4,023
On shipboard	321
Christchurch...	17,538
New Brighton	1,008
‖Sydenham	11,404
‖St. Albans	6,607
‖Linwood	6,737
Woolston	2,532
Sumner	844
Akaroa	559
On shipboard	5
Ashburton	2,322
Temuka...	1,465
Timaru	6,424
On shipboard	62
Waimate	1,359
Oamaru	4,836
On shipboard	17
Hampden	331
Palmerston South	738
Hawksbury	690
Port Chalmers	2,056
On shipboard...	149
North-east Valley	3,527
Maori Hill	1,550
West Harbour	1,465

* Boundaries since altered. † Since reduced by creation of Featherston County.
‡ Since reduced by creation of Mount Herbert County. § Since merged in Wellington.
‖ Since merged in Christchurch.

Counties.	Census, 1901.	Boroughs.	Census, 1901.
Peninsula	2,561		
Taieri	7,179	Dunedin	24,879
		On shipboard	228
		Roslyn	4,632
		Mornington	4,008
		Caversham	5,266
		St. Kilda	1,700
		South Dunedin	5,363
		Green Island	667
		Mosgiel	1,463
Bruce	4,762	Milton	1,241
		Kaitangata	1,463
Tuapeka	6,272	Lawrence	1,159
		Roxburgh	478
		Tapanui	350
*Clutha	6,445	Balclutha	1,017
Maniototo	3,792	Naseby	505
Vincent	4,362	Cromwell	642
		Alexandra	818
Lake	2,535	Arrowtown	410
		Queenstown	690
*Southland	22,583	Gore	2,354
		Mataura	867
		Winton	474
		Invercargill	6,215
		Invercargill North	925
		Invercargill South	1,874
		Invercargill East	939
		Avenal	355
		Gladstone	329
		Campbelltown	1,350
		On shipboard	303
Wallace	7,989	Riverton	815
Fiord	124		
Stewart Island	253		
On shipboard	19		

[Chatham Islands, with a population of 207 at time of census of 1901, has since been created a county.]

The total county population amounted to 417,596, or 54·04 per cent. of the total for the colony.† In counties are included all towns not constituted municipal boroughs; but, on the other hand, the people living in many of the boroughs can hardly be called town population. The population in boroughs was 350,202 persons, or 45·32 per cent. of the whole. For every 100 persons resident in counties in 1901 there were 84 residing in boroughs. In 1896 the counties had 391,735 persons, and the boroughs 307,294, or, in other words, for every 100 persons in counties, 78 were residents of the boroughs. Thus it will be seen that the proportion of the town to the county population was greater in 1901 than in 1896.

Chief Cities and Suburbs.

The Cities of Auckland, Christchurch, and Dunedin have considerable suburbs. The suburban population of Wellington is comparatively small. The following gives the names and populations of the several localities which may fairly be termed suburbs of the four principal cities:—

* Boundaries since altered. † For population of ridings, road districts, and localities, see Census volume, Part I.

SUBURBS OF AUCKLAND.

	Population, Census, 1901.
Boroughs—	
Birkenhead	1,057
Devonport	3,823
Newmarket	2,060
Grey Lynn (Newton)	4,110
Parnell	4,566
Road Districts—	
Arch-hill	1,671
Eden Terrace	2,011
Epsom	750
Mount Albert	2,085
Mount Eden	5,129
Mount Roskill	581
One-tree Hill	1,283
Point Chevalier	684
Remuera	2,186
Northcote Riding	767
Outlying portion of Parnell Riding, being land in the Domain with hospital on it	250
Total suburbs	33,013
Auckland City	34,213
Total Auckland and suburbs	67,226

SUBURBS OF WELLINGTON.

Boroughs—	
Onslow	1,499
*Melrose	2,995
Karori	1,212
Total suburbs	5,706
Wellington City	43,638
Total Wellington and suburbs	49,344

SUBURBS OF CHRISTCHURCH.

	Population, Census, 1901.
Boroughs—	
†Sydenham	11,404
†St. Albans	6,607
†Linwood	6,737
New Brighton	1,008
Woolston	2,532
Road Districts—	
Spreydon	1,457
Halswell (part)	156
Riccarton (part)	4,371
Avon (part)	2,843
Heathcote (part)	2,388
Total suburbs	39,503
Christchurch City	17,538
Total Christchurch and suburbs	57,041

In laying off the suburbs of Christchurch the boundaries of the Christchurch Health District have been mainly followed.

SUBURBS OF DUNEDIN.

Boroughs—	
Caversham	5,266
Maori Hill	1,550
Mornington	4,008
North-East Valley	3,527
Roslyn	4,632
St. Kilda	1,700
South Dunedin	5,363
West Harbour	1,465
Total suburbs	27,511
Dunedin City	24,879
Total Dunedin and suburbs	52,390

* Since merged in Wellington.

† Since merged in Christchurch.

The increase of population for ten years at the four chief centres, with their suburbs, was:—

	Census, 1891.	Census, 1901.	Numerical Increase.	Increase per Cent.
Auckland and suburbs	51,287	67,226	15,939	31·08
Wellington and suburbs	34,190	49,344	15,154	44·32
Christchurch and suburbs	47,846	57,041	9,195	19·22
Dunedin and suburbs	45,869	52,390	6,521	14·22

Thus the two principal cities of the North Island are found to have progressed between 1891 and 1901 at a greater rate than those of the Middle Island, and Wellington in particular to have developed at more than three times the rate of Dunedin, and more than twice as fast as Christchurch.

While New South Wales and Victoria present what is termed by the statistician of the former State "the disquieting spectacle of capital towns growing with wonderful rapidity, and embracing in their limits one-third of the population of the territory of which they are the centre," New Zealand is saved from this by the configuration of the country, which has resulted in the formation of four chief towns, besides others of secondary importance but nevertheless trading centres of considerable consequence.

Population of Town Districts and Small Centres.

Besides the boroughs, there were 35 town districts (including the special town district of Rotorua, constituted under "The Thermal-Springs Districts Act, 1881,") which are portions of the counties in which they are situated. One only of these, Hampstead, has more than 1,000 inhabitants. A list of these town districts is subjoined, with populations, as in 1901 :—

Town Districts.	Population.	Town Districts.	Population.
Kamo	260	Taradale	763
Helensville	531	Ormondville	459
Papakura	286	Waipawa	669
Te Awamutu	355	Kaikora North	268
Kihikihi	222	Featherston	629
Ngaruawahia	245	Johnsonville	502
Rotorua*	914	Havelock	316
Opotiki	627	Amberley	417
Waitara (Raleigh)	765	Southbridge	396
Opunake	466	Hampstead	1,118
Inglewood†	719	Tinwald	561
Normanby	370	Geraldine	868
Manaia	447	Allanton (formerly Grey)	227
Waverley	416	Outram	420
Lethbridge	230	Clinton	431
Bulls	501	Wyndham	417
Halcombe	336	Otautau	443
Clyde (Wairoa)	623		

In addition to the boroughs and town districts above referred to, the census results showed for 1901 throughout the colony no less than 683 places of the nature of townships, villages, or small centres without boundaries. It is impossible to say that the populations of these small centres are all strictly accurate, even for the census date, or given in such a way as to be fit for comparison one with another. In different cases more or less of surrounding country may have been considered as belonging to the centre, but there is at least at each place mentioned some sort of nucleus of population, if not a well-defined village or township. In making the statement the best has been done with a difficult matter, and

* Constituted under "The Thermal-Springs Districts Act, 1881." † Now a municipal borough.

the information is given as useful—in some cases, like that of Waihi and Reefton, important—even if open to objection here and there. The county in which each is situated is also given:—

	Population.
Abbotsford, Taieri	284
Adair, Levels	206
Adams's Flat, Bruce	76
Adamson's, Southland	69
Addison's Flat, Buller	208
Ahaura, Grey	219
Albany, Waitemata	87
Albert Town, Vincent	73
Alford Forest, Ashburton	221
Alfredton (and vicinity), Masterton	332
Allandale, Waihemo	115
Allenton, Ashburton	837
Alma, Waitaki	123
Alton, Patea	58
Anderson's Bay, Peninsula	567
Annat, Selwyn	105
Antonio's Flat, Inangahua	51
Aongatete, Tauranga	22
Aoroa, Hobson	373
Apiti, Pohangina	128
Aramoho, Waitotara	1,002
Arapohu, Hobson	189
Aratapu, Hobson	556
Arden, Taieri	87
Argyle, Southland	80
Arthurtown, Westland	74
Arundel, Geraldine	38
Ashley, Ashley	202
Ashhurst (and vicinity), Oroua	545
Athol, Southland	72
Avondale, Eden	826
Awahuri, Manawatu	42
Awakino, Kawhia	124
Awanui, Waiapu	51
Awhitu, Manukau	413
Bainham, Collingwood	126
Bald Hill Flat, Vincent	175
Ballance, Pahiatua	73
Bannockburn, Vincent	394
Barkly, Southland	63
Barry's Bay, Akaroa	154
Basting's, Tuapeka	28
Beaconsfield, Levels	122
Beck's, Maniototo	67
Belfast, Selwyn	613
Belfield Village Settlement, Geraldine	166
Belgrove, Waimea	156
Bendigo, Vincent	49
Bennett's, Ashley	77
Berwick, Taieri	87
Blackball, Grey	382
Black's Point, Inangahua	315
lackwater, Inangahua	149
Blair Taieri, Taieri	35
Blue Spur, Westland	135
Bombay, Manukau	363
Bowentown, Tauranga	24
Brighton, Buller	19
Brighton, Taieri	119
Brightwater, Waimea	391
Broad Bay, Peninsula	156
Brockville, Taieri	23
Buckley, Cook	164
Buffalo (and vicinity), Coromandel	574
Bulltown, Ohinemuri	27
Bunnythorpe (and vicinity), Oroua	148
Burke's, Mackenzie	143
Burnside (and vicinity), Taieri	469
Burnveil and Lovell's Flat, Bruce	89
Burwood, Selwyn	140
Cabbage Bay, Coromandel	18
Callaghan's, Westland	79
Cambrian's, Maniototo	103
Cambridge West, Waipa	238
Cape Foulwind, Buller	182
Capleston, Inangahua	153
Cardrona, Lake	126
Castlecliffe, Waitotara	412
Castlepoint, Castlepoint	22
Centre Bush, Southland	83
Charleston, Buller	199
Charlton, Southland	108
Chatton, Southland	32
Cheltenham, Kiwitea	39
Chertsey, Ashburton	99
Clareville, Wairarapa South	93
Clarkville, Ashley	253
Clifden, Wallace	93
Clifton, Collingwood	60
Clyde, Vincent	374
Coalbrookdale, Buller	111
Coal Creek, Tuapeka	220
Coalgate (and vicinity), Selwyn	129
Cobden, Grey	423
Collingwood, Collingwood	16
Cooptown, Akaroa	96
Coromandel, Coromandel	663
Courtenay, Selwyn	161
Crofton, Rangitikei	148
Cromarty, Fiord	28
Crushington, Inangahua	152
Cullensville, Marlborough	84
Culverden, Amuri	87
Dacre, Southland	44
Dalefield, Wairarapa South	311
Danieltown, Wallace	68
Darfield, Selwyn	118
Dargaville, Hobson	505

	Population.
Deborah, Waitaki	34
Deborah Bay, Waikouaiti ..	163
Denlair, Wanganui	61
Denniston, Buller	793
Dillman's, Westland	168
Dipton, Southland	68
Doyleston, Selwyn	154
Dromore, Ashburton	78
Drummond, Wallace	248
Drury (and vicinity), Manukau	364
Dunback, Waihemo	165
Dunganville, Grey	90
Dunkeld, Tuapeka	105
Dunsandel, Selwyn	236
Duntroon, Waitaki	181
Durietown, Wanganui ..	355
Duvauchelle's Bay, Akaroa ..	145
East Clive, Hawke's Bay ..	141
East Dipton (and vicinity), Southland	139
Eastern Bush, Wallace ..	17
Eastown, Wanganui	298
East Winton, Southland ..	155
Edendale, Southland	180
Egmont, Taranaki	33
Eketahuna, Eketahuna ..	340
Ellesmere, Selwyn	103
Eltham, Hawera*	400
Enfield, Waitaki	161
Epworth, Geraldine	105
Ettrick, Tuapeka	68
Evansdale, Waikouaiti ..	52
Eweburn, Maniototo	103
Fairdown, Buller	75
Fairfax (and vicinity), Bruce ..	183
Fairfield, Taieri	110
Fairlie, Mackenzie	597
Feldwick, Wallace	23
Fendalton, Selwyn	309
Fernhills, Southland	70
Fernside (and vicinity), Ashley	550
Ferntown, Collingwood ..	81
Flax Swamp, Waikouaiti ..	87
Flaxton, Ashley	17
Fordell, Wanganui	283
Fortrose, Southland	131
Frankton, Lake	265
Frasertown, Wairoa	175
Galatea, Whakatane	14
Garfield, Wallace	42
Georgetown, Waitaki	84
German Bay, Akaroa	155
Gibbston, Lake	158
Gibbstown, Collingwood ..	192
Gimmerburn, Maniototo ..	196
Glenavy, Waimate	98
Gleniti (and vicinity), Levels ..	99
Glenorchy, Lake	18
Glenore, Bruce	81
Glentunnel, Selwyn	153

	Population.
Golden Cross, Ohinemuri ..	383
Goldsborough, Westland ..	146
Gordon Special Settlement, Piako	89
Governor's Bay, Akaroa ..	169
Grahamstown, Whangarei ..	60
Granity Creek, Buller ..	366
Grassmere, Southland ..	137
Greatford (and vicinity), Rangitikei	132
Greendale, Selwyn	340
Green Island Bush, Taieri ..	229
Greenlane, Eden	191
Greenpark, Selwyn	336
Greerton, Tauranga	99
Grovetown, Marlborough ..	352
Gumtown, Coromandel ..	107
Hakaru, Otamatea	44
Hakataramea (and vicinity), Waimate	264
Hamilton, Maniototo	27
Hampden, Waipawa	261
Hamua, Pahiatua	202
Hanmer Springs, Amuri ..	154
Harwood, Southland	81
Hastings, Thames	112
Hastwell, Mauriceville ..	220
Hatter's, or Nelson Creek, Grey	156
Hawarahu, Manukau	62
Havelock, Hawke's Bay ..	374
Hawarden, Ashley	66
Hawea, Vincent	89
Hawthorndale, Southland ..	42
Heddon Bush, Wallace ..	146
Henderson (and vicinity), Waitemata	357
Henley, Taieri	122
Herbert, Waitaki	282
Herbertville, Patangata ..	129
Heriot (and vicinity), Tuapeka ..	206
Highcliffe, Peninsula	222
Hikurangi, Whangarei ..	495
Hikutaia, Thames	152
Hillgrove, Waitaki	37
Hindon, Taieri	192
Hirstfield, Wallace	52
Hobsonville, Waitemata ..	194
Hodgkinson, Wallace	48
Hohoura, Mongonui	272
Holmesdale, Wallace	19
Horndon, Selwyn	188
Hororata, Selwyn	269
Howick (and vicinity), Manukau	617
Huia, Taranaki	54
Huiakama, Stratford	45
Huirangi, Taranaki	40
Hukerenui, Whangarei ..	110
Hunterville, Rangitikei ..	576
Huntly, Waikato	622
Hurunui, Ashley	58
Hyde, Maniototo	164

* Now a municipal borough.

	Population.
Ida Valley, Vincent	203
Inangahua Junction, Inangahua	98
Inglewood, Southland ..	46
Islington, Selwyn	289
Jackeytown, Oroua	85
Josephville, Southland ..	19
Kaeo (and vicinity), Whangaroa	324
Kaihu, Hobson	105
Kai Iwi, Waitotara	111
Kaikohe, Bay of Islands ..	115
Kaikoura, Kaikoura	516
Kaitaia, Mongonui	106
Kaitawa, Pahiatua	95
Kakanui (North), Waitaki ..	126
Kakanui (South), Waitaki ..	181
Kakaramea, Patea	117
Kanieri, Westland	149
Kapanga, Coromandel ..	328
Karaka, Cook	110
Karangahake, Ohinemuri ..	205
Katu, Hokianga	48
Kaukapakapa, Waitemata ..	543
Kaurihohore, Whangarei ..	191
Kawakawa, Bay of Islands ..	263
Kawarau Gorge, Vincent ..	40
Kawhia, Kawhia	158
Keel, Ashley	166
Kennedy Bay, Coromandel ..	89
Kennington, Southland ..	56
Kereru (and vicinity), Horowhenua	275
Kerrytown, Levels	156
Killinchy, Selwyn	77
Kimberley, Selwyn	149
Kimbolton, Kiwitea	219
Kingsdown, Levels	114
Kingston, Lake	61
Kirwee (and vicinity), Selwyn ..	333
Kohimui, Pahiatua	53
Kohukohu, Hokianga	128
Kokonga, Maniototo	45
Komaka, Pohangina	57
Konini (vicinity), Pahiatua ..	247
Kopu, Thames	166
Koru, Taranaki	93
Kuaotunu, Coromandel ..	375
Kukunui (Brownstown), Eketahuna	136
Kumeroa, Waipawa	148
Kuri Bush, Taieri	150
Kuriwao, Clutha	94
Kurow, Waitaki	264
Kyeburn Diggings, Maniototo ..	190
Kyeburn, Upper, Maniototo ..	78
Lake Hayes, Lake	194
Larrikins, Westland	90
Lauder, Maniototo	43
Leedstown (and vicinity), Rangitikei	269
Leeston, Selwyn	257
Leithfield, Ashley	298
Lepperton, Taranaki	36
Levin, Horowhenua	1,147
Lichfield, Piako	41
Lime Hills, Southland ..	96
Lincoln (and vicinity), Selwyn ..	464
Lintley, Southland	54
Linton, Oroua	61
Little Akaloa, Akaroa	233
Livingstone, Waitaki	123
Longburn (and vicinity), Oroua	358
Long Bush, Southland ..	215
Longford, Inangahua	25
Longridge, Southland	112
Lowburn, Vincent	133
Lowther, Southland	15
Luggate, Vincent	51
Lumsden, Southland	275
Lumsden Extension, Southland	162
Lyell, Buller	90
Macandrew, Southland ..	30
Macetown, Lake	113
Mackaytown (and vicinity), Ohinemuri	1,085
Mackenzie, Cheviot	113
Macrae's (and vicinity), Waihemo	59
Maheno, Waitaki	226
Maitland, Southland	22
Makakahi, Pahiatua	42
Makarewa, Southland	370
Maketu, Tauranga	41
Makikihi, Waimate	112
Makomako (and vicinity), Pahiatua	154
Makuri, Pahiatua	85
Makutoku, Waipawa	271
Manakau, Horowhenua ..	184
Mandeville, Southland ..	129
Mangahao, Pahiatua	43
Mangamahoe, Mauriceville ..	131
Mangamaire, Pahiatua ..	96
Mangaonoho, Rangitikei ..	342
Mangare (and vicinity), Manukau	702
Mangatainoko, Pahiatua ..	171
Mangawai, Otamatea	193
Mangaweka (and vicinity), Rangitikei	956
Mansfordtown, Waikouaiti ..	377
Manurewa, Manukau	70
Manutahi, Patea	72
Maori Gully, Grey	7
Mapourika, Westland	20
Marima, Pahiatua	50
Marsden, Grey	37
Marshalltown, Kiwitea ..	66
Martinborough (and vicinity), Wairarapa South	551
Matakanui, Vincent	219
Matakana, Rodney	172

	Population.
Matakohe, Otamatea	338
Matamau, Waipawa	292
Mauku (and vicinity), Manukau	306
Mauriceville, Mauriceville ..	203
Maxwelltown, Waitotara ..	207
Mayfield, Waitemata	112
Meanee, Hawke's Bay ..	63
Medbury Village Settlement, Ashley	130
Menzies' Ferry, Southland ..	91
Mercer (and vicinity), Manukau	208
Merrijigs, Inangahua	68
Merton, Waikouaiti	170
Methven, Ashburton	296
Middlemarch, Taieri	226
Midhirst, Stratford	330
Milford, Geraldine	157
Millwood, Southland	75
Mohaka, Wairoa	119
Mokau, Kawhia	70
Mokihinui, Buller	29
Mokoreta, Southland	47
Mongonui, Mongonui	249
Morley, Wallace	70
Morrinsville, Piako	300
Mosstown, Waitotara ..	225
Motu, Cook	64
Moutere, Waimea	129
Murawai, Cook	23
Murchison, Inangahua ..	104
Neavesville, Thames	25
Netherton, Ohinemuri ..	155
Nevis, Vincent	168
Newman, Eketahuna	178
Newport, Hobson	129
Ngahauranga, Hutt	168
Ngahere, Grey	123
Ngaire, Stratford	81
Ngakawau, Buller	12
Ngapara, Waitaki	201
Niagara, Southland	87
Nightcaps, Wallace	373
Nikau (and vicinity), Pahiatua	114
Nukomai, Southland	113
Nolan, Hawera	129
Normanby, Levels	130
Norsewood (and vicinity), Waipawa	914
Northcote, Waitemata ..	767
North Taieri (and vicinity), Taieri	602
No Town, Grey	66
Nukumaru, Waitotara ..	61
Oaklands, Peninsula	76
Oakura, Taranaki	44
Oban, Stewart Island	80
Ohaeawai, Bay of Islands ..	112
Ohau (and vicinity), Horowhenua	309
Ohaupo, Waipa	250
Ohinemutu, Rotorua	107
Ohingaiti (and vicinity), Rangitikei	464
Ohiwa, Opotiki	19
Ohoka, Ashley	426
Okaiawa, Hawera	94
Okaihau and Omapere, Bay of Islands	273
Okain's Bay, Akaroa	278
Okarito, Westland	66
Okato, Taranaki	92
Okoroire, Piako	211
Omahu, Thames	268
Omata, Taranaki	41
Ongaonga, Waipawa	107
Ophir, Vincent	132
Opitonui, Coromandel ..	277
Opua, Bay of Islands	62
Opuriao, Whakatane	161
Oraka, Wallace	185
Orari, Geraldine	118
Ormond (and vicinity), Cook ..	482
Oropi, Tauranga	53
Orwell Creek, Grey	59
Otahuhu, Manukau	1,211
Otaki (and vicinity), Horowhenua	629
Otakia, Taieri	102
Otara, Opotiki	150
Otara, Southland	135
Otawa, Manukau	53
Otekaike, Waitaki	54
Otiake, Waitaki	118
Otorohanga, Kawhia	150
Owaka, Clutha	635
Owen Junction, Inangahua ..	28
Owharoa (and vicinity), Ohinemuri	485
Oxford East, Ashley	311
Oxford West, Ashley	176
Paeroa, Ohinemuri	1,504
Pahia, Wallace	151
Pahautanui, Hutt	104
Paikakariki, Hutt	160
Pakawau, Collingwood ..	39
Pakington, Manukau	69
Panmure, Eden	259
Papanui, Selwyn	270
Paparata, Manukau	180
Papatoitoi (and vicinity), Manukau	219
Parangahatu, Akitio	55
Paraparaumu, Hutt	198
Parkville, Eketahuna	202
Patumahoe, Manukau ..	148
Patutahi (and vicinity), Cook ..	228
Peel (and vicinity), Geraldine ..	170
Pembroke, Lake	130
Pigeon Bay, Akaroa	157
Pihama, Hawera	27
Pine Hill, Waikouaiti	41
Pipiriki (and vicinity), Wanganui	233
Piritarau, Waiapu	164
Pirongia East, Waipa	89
Pleasant Point, Levels ..	749

	Population.
Pleasant Valley, Waikouaiti	50
Pleckville, Eketahuna	71
Plimmerton, Hutt	92
Pohangina, Pohangina	167
Pokeno (and vicinity), Manukau	460
Porirua, Hutt	80
Porangahau, Patangata	187
Poro-o-torao, Clifton	235
Port Albert, Rodney	241
Port Awanui, Waiapu	51
Port Moeraki, Waitaki	197
Port Waikato, Raglan	14
Portobello Town, Peninsula	50
Puangi, Clifton	40
Puhoi, Rodney	39
Pukekohe East, Manukau	331
Pukekohe, Manukau	611
Pukerau, Southland	129
Pungarehu, Taranaki	143
Puni, Manukau	212
Purakanui, Waikouaiti	31
Puriri, Thames	220
Putara, Eketahuna	29
Putiki, Wanganui	145
Queensbury, Vincent	54
Raetihi (and vicinity), Wanganui	433
Raglan, Raglan	114
Rahotu, Taranaki	80
Rakaia, Ashburton	439
Rakaia Village Settlement, Ashburton	187
Rakaunui, Akitio	46
Rama Rama, Manukau	204
Rangiriri, Waikato	76
Rangiwahia (Pemberton), Kiwitea	88
Rata Settlement, Rangitikei	210
Raupo, Otamatea	108
Rawene, Hokianga	103
Redcliffe, Waimate	86
Redwood Town, Marlborough	143
Reefton, Inangahua	1,722
Reidston, Waitaki	80
Renwicktown, Marlborough	292
Reynolds, Waikouaiti	35
Riccarton, Selwyn	313
Richmond, Selwyn	252
Richmond Grove, Southland	101
Rikiorangi, Hutt	138
Rimu, Westland	148
Rimu, Southland	56
Riversdale, Southland	312
Riwaka, Waimea	687
Rockville, Collingwood	102
Rolleston, Selwyn	85
Rongotea, Manawatu	229
Rotherham, Amuri	146
Round Hill Diggings, Wallace	178
Ruapekapeka, Bay of Islands	119
Runciman, Manukau	30
Russell, Bay of Islands	246
Sandymount, Peninsula	177
Sanson, Manawatu	210
Sawyer's Bay, Waikouaiti	305
Scarborough, Levels	54
Scarborough (and vicinity), Pahiatua	198
Scotsburn, Geraldine	24
Sefton (and vicinity), Ashley	620
Selwyn, Selwyn	33
Serpentine, Maniototo	44
Shaftesbury, Piako	85
Shannon, Horowhenua	272
Shawfield, Waikouaiti	125
Sheffield, Selwyn	153
Shiel Hill, Peninsula	86
Shirley, Selwyn	165
Shortland, Thames	1,217
Silverstream, Mackenzie	98
Skippers, Lake	92
Southbrook (and vicinity), Ashley	1,070
Spring Creek (and vicinity), Marlborough	264
Springfield, Selwyn	247
Spring Grove, Waimea	348
Springston, Selwyn	644
Stafford, Westland	116
St. Andrew's, Waimate	127
St. Bathan's, Maniototo	231
St. Helier's Bay, Eden	24
St. Kilda, Buller	16
Stirling (and vicinity), Bruce	232
Stoke, Waimea	511
Strathmore, Stratford	54
Studholme Junction, Waimate	138
Swannanoa, Ashley	100
Swanson, Waitemata	147
Taheke, Hokianga	21
Taiaroa Heads, Peninsula	45
Taihape (and vicinity), Rangitikei	461
Taipa, Mongonui	20
Tairua, Thames	360
Taitapu, Selwyn	268
Takapau (and vicinity), Waipawa	431
Tamaki West (and vicinity), Eden	351
Tarras, Vincent	158
Tatararaki, Hobson	348
Taueru, Masterton	139
Tauherenikau, Wairarapa South	113
Taupaki, Waitemata	131
Taupiri, Waikato	136
Taupo, East Taupo	79
Tavistock, Waimate	28
Taylorville, Wanganui	33
Te Anui, Wallace	16
Te Aroha West, Piako	158
Te Aute, Waipawa	120
Teddington, Akaroa	69
Te Horo, Horowhenua	98
Te Kopuru, Hobson	325
Te Kuiti, Kawhia	134

	Population.
Templeton, Selwyn	67
Teoneroa, Fiord	37
Te Puke (and vicinity), Tauranga	477
Te Teko, Wnakatane	20
Thornbury, Wallace	262
Thorpe, Waimea	100
Tikorangi, Clifton	29
Tiniroto, Cook	62
Tinui, Castlepoint	295
Tokaanu, East Taupo ..	55
Toka-Toka, Otamatea	96
Toko, Stratford	240
Tokomaru, Horowhenua ..	116
Tokomaru (and vicinity), Waiapu	196
Totara, Whangaroa	155
Totara, Waitaki	176
Totara East, Grey	188
Tuakau, Manukau	418
Tuamarina, Marlborough ..	44
Tumai, Waikouaiti	22
Tutaekara, Pahiatua	58
Turua, Thames	244
Upper Hutt, Hutt	309
Urenui, Clifton	165
Utiku, Rangitikei	297
Vauxhall, Peninsula	52
Vogeltown, Taranaki	176
Waddington, Selwyn	134
Wade, Waitemata	229
Waianiwa, Southland ..	52
Waiau, Amuri	153
Waiau, Manukau	63
Waihi, Ohinemuri*	3,813
Waihola, Bruce	190
Waihou (and vicinity), Piako ..	410
Waikaia, Southland	230
Waikaka, Southland	112
Waikanae, Horowhenua ..	149
Waikare, Ashley	417
Waikawa, Southland	44
Waikiwi, Southland	152
Waikoikoi, Clutha	13
Waimangaroa, Buller ..	151
Waima, Hokianga	43
Waimata, Cook	117
Waimate, Bay of Islands ..	105
Waimatuku, Wallace	166
Waimea West, Waimea ..	221
Wainuiomata, Hutt	48
Waiomio, Bay of Islands ..	74
Waiorongomai, Piako	154
Waiotahi, Opotiki	117
Waipahi, Clutha	130
Waipara, Southland	17
Waipara, Ashley	141
Waipipi, Manukau	135
Waipiro (and vicinity), Waiapu	118
Waipori, Tuapeka	211
Waipu Central (and vicinity), Whangarei	461

	Population
Waipukurau, Waipawa ..	565
Wairaki, East Taupo	25
Wairio (and vicinity), Wallace ..	271
Waitahuna, Tuapeka	301
Waitati (and vicinity), Waikouaiti	272
Waitekauri, Ohinemuri ..	441
Waitotara, Patea	173
Waituna, Kiwitea	53
Waiwera, Waitemata	59
Waiwera, Clutha	167
Waiuku, Manukau	205
Wakefield, Waimea	479
Wallacetown, Southland ..	160
Wallingford, Patangata ..	90
Wangaehu, Wanganui ..	19
Wangamomona, Stratford ..	23
Wanstead, Patangata ..	111
Waotu, West Taupo	71
Warepa, Clutha	217
Warkworth, Rodney	572
Washdyke, Levels	217
Waterford, Tauranga	50
Waterton (and vicinity), Ashburton	197
Wayne's, Waihemo	24
Weber, Patangata	159
Weedon's, Selwyn	106
Wereroa, Horowhenua ..	58
West Clive, Hawke's Bay ..	333
West Melton, Selwyn	280
Weston, Waitaki	237
Whakataki, Castlepoint ..	50
Whakarewarewa, Rotorua ..	48
Whakatane, Whakatane ..	239
Whangapoua, Coromandel ..	61
Whangaroa, Whangaroa ..	100
Whare Flat, Taieri	93
Whenuakiti, Coromandel ..	40
Whitecliffs, Selwyn	98
Whitmore, Oroua	80
Whitstone, Waitaki	51
Wickliffe Bay, Peninsula ..	30
Wimbledon, Patangata ..	90
Winchester, Geraldine ..	170
Windsor, Waitaki	130
Woodbury, Geraldine	111
Woodend, Ashley	365
Woodend, Southland	115
Woodfield, Southland	34
Woodlands, Southland ..	207
Woodside, Taieri	222
Woodside, Wairarapa South ..	23
Woodstock, Westland	189
Woodstock Village Settlement, Ashley	50
Wrey's Bush, Wallace ..	289
Yaldhurst, Selwyn	143

* Now a municipal borough.

Population of Adjacent Islands.

The names and populations of the islands adjacent to and included in the colony were, in March, 1901:—

Islands.	Total.	M.	F.
Mokohinau Lighthouse	8	5	3
Tiritiri Lighthouse	5	2	3
Motuhora	7	4	3
Great Barrier	510	357	153
Little Barrier	11	1	10
Kawau	21	7	14
Ponui	27	11	16
Ponui Lighthouse	2	1	1
Ruthe's	15	9	6
Pakatoa	5	3	2
Pahiki	4	3	1
Waiheke	162	81	81
Week's (Puketutu)	6	3	3
Motuihi	11	9	2
Bean Rock Lighthouse	1	1	...
Motutapu	11	7	4
Rakino	4	2	2
Rangitoto	3	3	..
Brown's	8	4	4
Mercury	14	5	9
Cuvier and Lighthouse	7	4	3
Slipper	3	3	..
Motiti	2	2	..
East Island Lighthouse	6	5	1
Portland and Lighthouse	21	13	8
Kapiti	3	1	2
Somes and Lighthouse	7	5	2
Stephen's	18	9	9
Brothers Lighthouse	3	3	..
Quarantine	2	1	1
Ruapuke	9	9	..
Dog Island and Lighthouse	16	9	7
Centre and Lighthouse	9	5	4
Resolution	2	2	..
Chatham Islands*	207	112	95
Kermadec Islands	8	5	3
Total	1,158	706	452

The islands which are not included within the boundaries of the counties had in 1901 a population of 1,158 persons (exclusive of Maoris), against 950 in 1896. Only three of the islands had a population over 100 persons at last census. The population of the Great Barrier increased since 1896 from 307 to 510 persons; Waiheke showed a decrease from 166 to 162 persons. Europeans at the Chatham Islands decreased from 234 to 207.

* Now a county.

Population of Australasia.

The growth of population in Australasia over a period of forty years is shown in a comparative table. The total for March, 1901, being 4,557,323 persons, is greater than the population of Ireland or Scotland for 1900, and one-seventh part of the population of England and Wales for that year. Australasia has now twice the population of Denmark, over one-third more than Switzerland, and nearly that of the Netherlands.

	Persons. 1860.	Persons. 1870.	Persons. 1880.	Persons, 1890.	Census. March, 1901.
New South Wales ..	348,546	498,659	747,950	1,121,860	1,362,200
Victoria	537,847	726,599	860,067	1,133,266	1,201,506
Queensland ..	28,056	115,567	226,077	392,965	503,266
South Australia ..	124,112	183,797	267,573	319,414	362,604
Western Australia ..	15,227	25,084	29,019	46,290	182,553
Tasmania	87,775	100,765	114,762	145,290	172,475
New Zealand ..	79,711	248,400	484,864	625,508	772,719
Australasia ..	1,221,274	1,898,871	2,730,312	3,784,593	4,557,323

SECTION II.—RELIGION.

Of the various religious denominations, the Church of England has most adherents in the colony. They numbered 314,024 at the date of the census; or, including 1,239 Protestants not more specifically described, 315,263 persons, being 40·84 out of every 100 of population. The Presbyterians numbered 176,503 persons, or 22·87 per cent., and the Roman Catholics came next with 108,960, or, including Catholics not further defined, 109,822, which gives a proportion of 14·23 per cent. The Methodists were 83,802, or 10·86 in every 100 persons. Of other denominations, the Baptists, of whom there were 16,035, and the Salvation Army, 7,999 persons, were those returning more than 1 per cent. of the total population, the proportions being 2·08 and 1·04 respectively. 18,295 persons objected to state their religious belief, or 2·38 in every 100.

The numbers and percentages for five censuses are given in tabular form, so as to allow of the degree of increase relatively to the population being observed :—

Denominations.	Number of Adherents in 1901.	Proportion per Cent. of Population.				
		1881.	1886.	1891.	1896.	1901.
Church of England and Protestants (undefined) ..	315,263	41·50	40·17	40·51	40·27	40·84
Presbyterians	176,503	23·08	22·59	22·62	22·78	22·87
Methodists	83,802	9·53	9·55	10·14	10·44	10·86
Baptists	16,035	2·34	2·48	2·37	2·28	2·08
Congregationalists	6,699	1·37	1·35	1·07	0·97	0·87
Lutherans	4,833	1·18	1·02	0·90	0·79	0·63
Salvation Army	7,999	..	0·91	1·50	1·50	1·04
Society of Friends	313	0·05	0·05	0·05	0·05	0·04
Unitarians	468	0·10	0·08	0·05	0·05	0·06
Other Protestants	16,877	1·26	1·55	1·82	2·16	2·19
Roman Catholics and Catholics (undefined)	109,822	14·08	13·94	13·96	14·07	14·23
Greek Church	189	0·01	0·01	0·01	0·02	0·02
Hebrews	1,611	0·31	0·27	0·23	0·22	0·21
Buddhists, Confucians ..	2,432	1·01	0·77	0·63	0·48	0·30
Other Denominations ..	1,347	0·11	0·10	0·12	0·16	0·17
No Denomination	8,240	0·89	1·05	1·32	1·22	1·07
No Religion	1,109	0·06	0·17	0·25	0·27	0·14
Unspecified	882	0·27	0·50	*	*	*
Object to state	18,295	2·85	3·44	2·45	2·27	2·38
	772,719	100·00	100·00	100·00	100·00	100·00

Here the proportion belonging to the Church of England is shown to have been 40 per cent. since 1886, but a little higher previously. Presbyterians have been 22 or 23 per cent. of the whole

* "Unspecified" not taken into account.

at each enumeration, but the proportion of Methodists rose steadily from 9·53 to 10·86. Congregationalists declined from 1·37 per cent. in 1881 to 0·87 per cent. in 1901. Lutherans are fewer in proportion to the total at each succeeding census, while the Salvation Army increased from 0·91 in 1886 to 1·50 in 1891 and 1896, decreasing again to 1·04 in 1901.

Roman Catholics and Catholics undefined formed practically 14 per cent. of the people at each of the census years. The proportion of Buddhists and Confucians diminishes with the number of Chinese in the colony. In 1886 the percentage of persons objecting to state their religion was 3·44, which fell to 2·45 in 1891, and, further, to 2·27 in 1896, rising slightly in 1901 to 2·38 per cent.

A full statement of the particulars for all denominations, as at the census of 1896 and 1901, is given, with the numerical and centesimal increase or decrease in each case. Amongst 1,093 given as "Other Protestants," 247 described themselves as "Church of God," 201 as "Christians of no Denomination," 145 as "Independents," 41 as "Our Father's Church," 33 as "Conditional Immortalists," 31 as "Gospel Mission," 29 as "Forward Movement," 26 as "Central Mission," and the remainder variously in very small numbers.

NUMBERS FOR EACH DENOMINATION, AND INCREASE.

Religious Denominations.	Census, 1901.			Census, 1896.	Increase or Decrease.	
	Persons.	Males.	Females.	Persons.	Numerical.	Centesimal.
Total population ..	772,719	405,992	366,727	703,360	69,359	9·86
Total for specified religions	771,837	405,372	366,465	702,238	69,599	9·91
Episcopalians—						
Church of England, and Episcopalians not otherwise defined ..	314,024	165,100	148,924	281,166	32,858	11·69
Protestants, undescribed	1,239	742	497	1,643	−404	−24·59
Presbyterians	176,503	92,406	84,097	159,952	16,551	10·35
Methodists—						
Wesleyan Methodists ..	71,034	35,362	35,672	63,373	7,661	12·09
Primitive Methodists ..	10,143	5,046	5,097	7,041	3,102	44·06
Methodists (undefined)	2,396	1,183	1,213	2,893	−497	−17·18
Others	229	122	107	60	169	..
Baptists	16,035	7,574	8,461	16,037	−2	−0·01
Congregationalists ..	6,699	3,154	3,545	6,777	−78	−1·15
Lutherans, German Protestants	4,833	3,063	1,770	5,538	−705	−12·73
Unitarians	468	283	185	375	93	24·80
Society of Friends ..	313	195	118	321	−8	−2·49
Church of Christ (Christian Disciples, Disciples of Christ, Disciples) ..	6,105	2,860	3,245	5,859	246	4·20
Brethren (Christian Brethren, Exclusive Brethren, Open Brethren, Plymouth Brethren) ..	7,484	3,450	4,034	5,035	2,449	48·64

NOTE.—The minus sign (−) indicates decrease.

NUMBERS FOR EACH DENOMINATION, AND INCREASE—*continued.*

Religious Denominations.	Census, 1901.			Census, 1896.	Increase or Decrease	
	Persons.	*Males.*	*Females.*	*Persons.*	*Numerical.*	*Centesimal.*
Believers in Christ ..	*31*	*14*	*17*	*77*	*—46*	*—59·74*
Evangelists (Evangelical Union, Evangelical Church, Evangelical Christians, Evangelical Brethren)	21	16	5	33	—12	—36·36
Nonconformists ..	61	36	25	95	—34	—35·79
Salvation Army ..	7,999	3,807	4,192	10,532	—2,533	—24·05
Christadelphians ..	989	497	492	952	37	3·89
Swedenborgians (New Church, New Jerusalem Church)	159	72	87	191	—32	—16·75
Seventh-day Adventists ..	864	357	507	776	88	11·34
Students of Truth ..	33	17	16	340	—307	—90·29
Dissenters	3	3	..	65	—62	—95·38
Christian Israelites, Israelites	34	19	15	61	—27	—44·26
Other Protestants ..	1,093	577	516	1,710	—617	..
Roman Catholics ..	108,960	56,490	52,470	97,525	11,435	11·73
Catholics (undefined) ..	862	480	382	1,279	—417	—32·60
Greek Church	189	134	55	116	73	62·93
Catholic Apostolic ..	326	140	186	247	79	31·98
Other Sects—						
Hebrews	1,611	826	785	1,549	62	4·01
Mormons, Latter-day Saints	272	145	127	289	—17	—5·88
Spiritualists	499	240	259	376	123	32·71
Buddhists, Confucians, &c.	2,432	2,413	19	3,391	—959	—28·28
Others	250	162	88	187	63	..
No Denomination—						
Freethinkers	2,856	2,245	611	3,983	—1,127	—28·30
Agnostics	552	413	139	562	—10	—1·78
Deists, Theists ..	59	51	8	46	13	28·26
No Denomination ..	4,740	3,006	1,734	3,898	842	21·60
Doubtful	33	14	19	46	—13	—28·26
No Religion—						
No Religion	1,012	752	260	1,605	—593	—36·95
Atheists	80	67	13	117	—37	—31·62
Secularists	17	12	5	153	—136	—88·88
Object to state	18,295	11,827	6,468	15,967	2,328	14·58
Unspecified	882	620	262	1,122	—240	—21·39

NOTE.—The minus sign (—) indicates decrease.

It will be seen by the table that, of the larger Protestant denominations, the Wesleyan Methodists increased since 1896 from 63,373 to 71,034 persons, being at the rate of 12·09 per cent.; Presbyterians from 159,952 to 176,503, or 10·35 per cent.; and the Church of England from 281,166 to 314,024, or 11·69 per cent. Baptists returned practically the same number of adherents as in 1896. The Salvation Army, which increased its numbers by 1,149 persons between 1891 and 1896, being at the rate of 12·25 per cent., now show a decrease of 2,533 persons, or 24·05 per cent. The numbers of the Brethren show an increase of 48·64 per cent., and

the Seventh-day Adventists 11·34 per cent. increase ; but the Congregationalists have decreased 1·15 per cent. and Lutherans 12·73 per cent. Of the Protestant bodies having but few members in the colony, the Unitarians increased from 375 to 468, and the Society of Friends fell in number from 321 to 313.

Roman Catholics added 11,435 to their number, being 11·73 per cent., a rate similar to that obtained by the Church of England.

Hebrews were 1,549 in 1896, and 1,611 in 1901, a difference of 62. Spiritualists progressed considerably, their numbers rising from 376 to 499, an increase of 32·71 per cent. Freethinkers decreased from 3,983 to 2,856, or 28·30 per cent., which is worthy of remark when contrasted with the increase of 14·01 per cent. gained between 1886 and 1891 ; and Agnostics, who numbered 562 in 1896, now show a decrease of 10.

Proportions of the Sexes in the Various Denominations.

While the number of males is found to be greater than that of the females in the Church of England, Presbyterian, Roman Catholic, and sundry other religious denominations, the contrary result is found in the following cases, the proportion per cent. being—

	Males.	Females.
Wesleyan Methodists	49·78	50·22
Primitive Methodists	49·75	50·25
Baptists	47·23	52·77
Congregationalist	47·08	52·92
Church of Christ	46·85	53·15
Brethren	46·10	53·90
Salvation Army	48·84	51·16
Seventh-day Adventists	41·32	58·68

Amongst those persons grouped as of "No Denomination," "No Religion," and "Object to state," the proportion of females is very small, as will be seen by the next figures :—

	Males.	Females.
No Denomination—		
Freethinkers	78·60	21·40
Agnostics	74·82	25·18
Deists, Theists	86·44	13·56
No Denomination	63·42	36·58
No Religion—		
No Religion	74·31	25·69
Atheists	83·75	16·25
Secularists	70·59	29·41
Object to state	64·70	35·30

Sunday-schools.

The attendance at Sunday-schools, with remarks thereon, is given in Section VIII., under the heading of "Education."

SECTION III.—BIRTHPLACE.

Of the population, exclusive of Maoris (772,719 persons), all but 442 were described as to birthplace on the census schedules. The number of the New Zealand-born was 516,106, and of those born in Australia, Tasmania, and Fiji, 27,215, making 543,321 born in Australasia. The New-Zealand-born increase in proportion to the whole with every successive census. In 1886, 51·89 per cent. of the population were born in this colony; in 1891, the percentage was 58·61; in 1896 it was 62·85; and in 1901 it had reached 66·83, adding to which 3·52 per cent. born in Australia, &c., makes 70·35 out of every 100 persons living in New Zealand who were born in Australasia.

205,111 persons, or 26·56 per cent. of the population, were born in the United Kingdom, which number was divided as under:—

Born in United Kingdom—	Number of Persons.	Per Cent. of Population
England	111,964	14·50
Wales	1,765	0·22
Scotland	47,858	6·20
Ireland	43,524	5·64
	205,111	26·56

Besides these, there were 4,049 persons born in other British possessions.

Summarising these results, it is found that 752,481 of the population, or 97·43 per cent., were born in the British possessions, made up as follows:—

Born in	Number of Persons.	Per Cent. of Population.
Australasia	543,321	70·35
United Kingdom	205,111	26·56
Other British Possessions	4,049	0·52
	752,481	97·43

There remained 18,593 persons born in foreign countries, or 2·41 per cent. of population; 1,203 born at sea; and 442 whose birthplaces were not specified.

The New Zealand-born population increased from 441,661 in 1896 to 516,106, or at the rate of 16·86 per cent., between 1896 and 1901, the numerical increase being 74,445 persons. The numbers born in the United Kingdom decreased altogether by 10,050 in the quinquennium.

Born in	Persons, 1901.	Decrease since 1896.	
		Numerical.	Centesimal.
England	111,964	4,577	3·93
Wales	1,765	383	17·83
Scotland	47,858	2,577	5·11
Ireland	43,524	2,513	5·46

The numbers of Australian-born are found to have increased for each State. The number born in New South Wales, living in New Zealand, was 4,536 in the year 1896, and 6,430 in 1901, an increase of 41·75 per cent. There were 10,471 persons in this colony in 1896 born in Victoria, and 12,583 at last census, or an increase of 20·17 per cent. in five years. New Zealand also gained on the number born in Queensland, there being 1,271 in 1901, against 930 in 1896, or 36·36 per cent. increase. And similarly on the South Australian, Western Australian, and Tasmanian-born.

The number of the people born in foreign countries was found to be 18,593, being 2·41 per cent. of the whole. Besides these, 1,203 persons were returned as born at sea. The greatest number of foreigners were Germans (4,217). Next come persons born in China (2,902). Swedes and Norwegians numbered 2,827. There were 2,120 persons from Denmark and her possesions, and 1,874 persons from Austria-Hungary.

The numbers of those born in France, Germany, the Netherlands, Belgium, Denmark, Poland, Switzerland, Spain, Portugal, Greece, China, Africa, and North (so described) America all decreased since 1896.

The following table gives full details as to birthplace, and under the head of "Allegiance" the number of British and foreign subjects in New Zealand:—

NUMBERS OF EACH NATIONALITY, AND INCREASE, 1896 TO 1901.

Where born.	Census, 1901.			Census, 1896.	Increase or Decrease.	
	Persons.	Males.	Females.	Persons.	Numerical.	Centesimal.
Total population ..	772,719	405,992	366,727	703,360	69,359	9·86
Total for specified birthplaces	772,277	405,690	366,587	702,756	69,521	9·89
British:—						
United Kingdom,—						
England	111,964	64,216	47,748	116,541	−4,577	−3·93
Wales	1,765	1,076	689	2,148	−383	−17·83
Scotland	47,858	27,516	20,342	50,435	−2,577	−5·11
Ireland	43,524	23,430	20,094	46,037	−2,513	−5·46
Australasia and Fiji,—						
New Zealand ..	516,106	257,828	258,278	441,661	74,445	16·86
Queensland.. ..	1,271	645	626	930	341	36·36
New South Wales ..	6,430	3,395	3,035	4,536	1,894	41·75
Victoria	12,583	6,530	6,053	10,471	2,112	20·17
South Australia ..	1,575	807	768	1,222	353	28·88

NOTE.—The minus sign (−) indicates decrease.

NUMBERS OF EACH NATIONALITY, AND INCREASE, 1896 TO 1901—*continued.*

Where born.	Census, 1901.			Census, 1896.	Increase or Decrease.	
	Persons.	Males.	Females.	Persons.	Numerical.	Centesima
Australia and Fiji—*contd.*						
Western Australia ..	230	103	87	112	78	69·64
Tasmania	19,70	2,084	1,636	3,160	560	17·72
Australia (State not named)	1,222	669	553	1,200	22	1·83
Fiji	224	98	126	151	73	48·34
Other British Possessions,—						
Gibraltar	48	24	24	49	−1	−2·04
Malta	55	37	18	71	−16	−22·54
India and Ceylon ..	1,286	722	564	1,341	−55	−4·10
Cape of Good Hope ..	141	72	69	246	−105	−42·68
St. Helena	43	25	18	50	−7	−14·00
British North America (Canada)	1,544	947	597	1,412	132	9·35
West Indies ..	208	144	64	247	−39	−15·79
Others	724	408	316	334	390	116·76
Foreign:—						
Austria Hungary ..	1,874	1,713	161	881	993	112·71
Belgium	117	84	33	138	−21	−15·22
Denmark and Possessions	2,120	1,384	736	2,125	−5	−0·24
France and Possessions	609	409	200	698	−89	−12·75
Germany	4,217	2,743	1,474	4,595	−378	−8·23
Greece	123	94	29	127	−4	−3·15
Italy	428	355	73	423	5	1·18
Netherlands and Possessions	116	105	11	132	−16	−12·12
Poland	97	65	32	101	−4	−3·96
Portugal and Possessions	172	151	21	173	−1	−0·58
Russia and Possessions	387	339	48	365	22	6·03
Spain and Possessions..	59	41	18	88	−29	−32·95
Sweden	1,548	1,337	211	1,514	34	2·25
Norway	1,279	931	348	1,261	18	1·43
Switzerland	333	251	82	342	−9	−2·63
Other European Countries	30	20	10	30	..	..
China	2,902	2,866	36	3,719	−817	−21·97
Africa	103	54	49	134	−31	−23·13
America, North America	776	501	275	969	−193	−19·92
United States of America	881	592	289	780	101	12·95
Other Foreign Countries	422	289	133	485	−63	−12·99
At sea	1,203	590	613	1,322	−119	−9·00
Unspecified	442	302	140	604	−162	−26·82
Allegiance.						
British subjects ..	761,104	396,052	365,052	690,003	71,101	10·30
Foreign subjects ..	11,615	9,940	1,675	13,357	−1,742	−13·04

NOTE.—The minus sign (−) indicates decrease.

SECTION IV. — CONJUGAL CONDITION OF THE PEOPLE.

Of 403,167 males, exclusive of Chinese, 273,113 were returned as unmarried, 118,475 as husbands, 10,653 as widowers, and 926 were unspecified as to conjugal condition.

These figures show a proportion of 67·90 per cent. of males to have been unmarried, 29·45 as husbands, and 2·65 as widowers, or, eliminating all males under 14 years who were necessarily unmarried, 53·91 per cent. not married, 42·29 per cent. husbands, and 3·80 widowers.

Of females, numbering altogether 366,695, there were 230,510 unmarried, 117,821 wives, 17,902 widows, and 462 not specified as to condition. Or, represented proportionally, of females at all ages, 62·94 per cent. were not married, 32·17 were wives, and 4·89 widows. Shutting off those under 14 years, the proportions stand as 45·18 unmarried, 47·59 wives, and 7·23 widows.

The proportions for successive census periods exhibit on the male side a rise in the percentage of the married men and a steady increase in regard to widowers since the year 1878. On the female side the percentage of the unmarried rose with regularity until the year 1891, while the married diminished; but since that date there has been a marked increase in the percentage of the married. The percentage of widows increased steadily. Chinese are excluded from the calculations.

Year.	Males.			Females.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1878	.. 70·09	28·06	1·85	62·59	34·32	3·09
1881	.. 70·39	27·73	1·88	63 64	33·05	3·31
1886	.. 70·35	27·61	2·04	64·59	31·74	3·67
1891	.. 70 02	27·61	2·37	64·95	30 94	4·11
1896	.. 69·48	27·97	2·55	64·37	31·10	4·53
1901	.. 67·90	29·45	2·65	62·94	32·17	4·89

The proportions at different age-periods show, for males, that the unmarried decrease from 99 per cent. at the period 17–20 to 65 per cent. at the period 25–30 years. At 30–35 years the hubands, who were only 34·61 per cent. at the previous period, exceeded the unmarried, the proportion being of husbands 58·54, unmarried, 40·30, divorced 0·08, and widowers 1·08 per cent. At 80–85 years the widowers were in the highest proportion per cent., the figures being 15·71 unmarried, 39·85 husbands, 0·19 divorced, and 44·25 widowers.

Of the females, 99 per cent. were spinsters at the period 14–18 years; thence onwards the proportion diminished and the wives and widows increased, until at 25–30 years the wives were in the highest

proportion—*i.e.*, 54·07 per cent., against 45·01 of unmarried females, 0·05 of divorced, and 0·87 widows. At 70–75 years the widows had increased so as to exceed the wives, being 52·31 per cent. against 43·53, whilst the spinsters had diminished to 4·16 per cent. At 85 and upwards the widows were 81·01 per cent. of the whole number of females.

The proportion of married women under 20 years of age is still steadily diminishing, while the proportion from 35 to 45 years has an increasing tendency. Women in New Zealand are therefore not now marrying at such early ages as they did in former years. The process brings the relative proportions closer to those that obtain in England :—

PROPORTIONS FOR 100 MARRIED WOMEN AT THE AGES 15 TO 45.

Ages.	England.	New Zealand.					
	1881.	1878.	1881.	1886.	1891.	1896.	1901.
Under 20 years ..	1·10	2·45	2·16	1·81	1·19	1·12	0·98
20 and under 35 years..	59·32	61·90	60·53	60·03	60·12	59·57	59·94
35 „ 45 „ ..	39·58	35·65	37·31	38·16	38 69	39·31	39·08
	100·00	100·00	100·00	100·00	100·00	100·00	100·00

The numbers and proportions according to conjugal condition for each age-period are exhibited in full detail :—

NUMBERS LIVING.

Males.

Ages.	Total.	Unmarried.	Husbands.	Widowers.	Divorced.	Not stated.
All ages	403,167	272,858	118,475	10,653	255	926
Specified ages ..	402,760	272,685	118,401	10,641	255	778
14 years and upwards	280,786	150,711	118,401	10,641	255	778
Under 14 years ...	121,974	121,974	..	..	..	..
14 years to 15 years..	8,747	8,747	..	..	..	..
15 „ 16 „ ..	8,456	8,456	..	..	..	..
16 „ 17 „ ..	8,568	8,566	..	..	..	2
17 „ 18 „ ..	8,453	8,443	4	..	..	6
18 „ 19 „ ..	8,536	8,508	16	..	..	12
19 „ 20 „ ..	8,439	8,402	28	..	..	9
20 „ 21 „ ..	8,554	8,440	94	1	..	19
21 „ 25 „ ..	32,607	29,482	2,953	34	4	134
25 „ 30 „ ..	35,145	22,730	12,121	156	10	128
30 „ 35 „ ..	29,463	11,845	17,206	317	24	71
35 „ 40 „ ..	23,983	6,854	16,577	445	41	66
40 „ 45 „ ..	21,128	4,898	15,434	706	26	64
45 „ 50 „ ..	18,647	3,700	13,956	859	47	55
50 „ 55 „ ..	14,948	2,788	11,098	970	34	58
55 „ 60 „ ..	13,450	2,423	9,699	1,259	24	45
60 „ 65 „ ..	12,571	2,320	8,711	1,484	17	39
65 „ 70 „ ..	10,074	2,347	5,927	1,756	15	29
70 „ 75 „ ..	5,317	1,094	2,931	1,267	7	18
75 „ 80 „ ..	2,277	444	1,105	709	3	16
80 „ 85 „ ..	1,046	164	416	462	2	4
85 „ and upwards	575	30	125	216	1	3
Unspecified ..	407	173	74	12	..	148

Females.

Ages.	Total.	Unmarried.	Wives.	Widows.	Divorced.	Not stated.
All ages	366,695	230,361	117,821	17,902	149	462
Specified ages ..	366,487	230,284	117,746	17,881	149	427
14 years and upwards	247,828	111,625	117,746	17,881	149	427
Under 14 years ..	118,659	118,659	..	..	..	..
14 years to 15 years..	8,358	8,358	..	..	..	..
15 „ 16 „ ..	8,376	8,375	1	..	..	..
16 „ 17 „ ..	8,689	8,677	10	..	..	2
17 „ 18 „ ..	8,430	8,352	72	..	..	6
18 „ 19 „ ..	8,425	8,215	193	1	..	16
19 „ 20 „ ..	8,438	7,924	501	..	..	13
20 „ 21 „ ..	8,583	7,593	963	5	..	22
21 „ 25 „ ..	33,369	24,114	9,090	67	8	90
25 „ 30 „ ..	33,227	14,918	17,923	290	16	80
30 „ 35 „ ..	27,271	6,986	19,617	593	35	40
35 „ 40 „ ..	21,216	3,373	16,854	929	33	27
40 „ 45 „ ..	17,347	1,783	14,182	1,342	21	19
45 „ 50 „ ..	13,995	966	11,309	1,683	17	20
50 „ 55 „ ..	11,990	665	9,239	2,068	5	13
55 „ 60 „ ..	9,963	467	7,144	2,330	6	16
60 „ 65 „ ..	8,017	347	5,222	2,422	6	20
65 „ 70 „ ..	6,027	253	3,283	2,468	2	21
70 „ 75 „ ..	3,236	134	1,404	1,687	..	11
75 „ 80 „ ..	1,679	86	515	1,074	..	4
80 „ 85 „ ..	852	26	173	649	..	4
85 years and upwards	340	13	51	273	..	3
Unspecified ..	208	77	75	21	..	35

PROPORTIONS TO EVERY 100 LIVING AT EACH AGE.

Males.

Ages.	Unmarried.	Husbands.	Widowers.	Divorced.
All ages	67·84	29·45	2·65	0·06
Specified ages	67·84	29·45	2·65	0·06
14 years and upwards ..	53·82	42·29	3·80	0·09
Under 14 years	..	..	..	..
14 years to 17 years ..	..	..	..	..
17 „ 18 „ ..	99·95	0·05	..	..
18 „ 19 „ ..	99·81	0·19	..	..
19 „ 20 „ ..	99 67	0·33	..	..
20 „ 21 „ ..	98·89	1·10	0·01	..
21 „ 25 „ ..	90·79	9·09	0·11	0·01
25 „ 30 „ ..	64·91	34·61	0·45	0·03
30 „ 35 „ ..	40·30	58 54	1·08	0·08
35 „ 40 „ ..	28·66	69·31	1·86	0·17
40 „ 45 „ ..	23·25	73·27	3·35	0·13
45 „ 50 „ ..	20·06	75·07	4·62	0·25
50 „ 55 „ ..	18·72	74·53	6·52	0·23
55 „ 60 „ ..	18·08	72·35	9·39	0·18
60 „ 65 „ ..	18·51	69·51	11·84	0·14
65 „ 70 „ ..	23·37	59·00	17·48	0·15
70 „ 75 „ ..	20·65	55·31	23·91	0·13
75 „ 80 „ ..	19·64	48·87	31·36	0·13
80 „ 85 „ ..	15·71	39·85	44·25	0·19
85 years and upwards ..	8·06	33·60	58·07	0·27

Ages.	*Females.* Unmarried.	Wives.	Widows.	Divorced.
All ages	62·90	32·17	4·89	0·04
Specified ages	62·91	32·17	4·88	0·04
14 years and upwards ..	45·12	47·59	7·23	0·06
Under 14 years	..	..	..	..
14 years to 15 years ..	..	..	..	..
15 " 16 " ..	99·99	0·01	..	..
16 " 17 " ..	99·88	0·12	..	..
17 " 18 " ..	99·15	0·85	..	..
18 " 19 " ..	97·69	2·30	0·01	..
19 " 20 " ..	94·05	5·95	..	..
20 " 21 " ..	88·69	11·25	0·06	..
21 " 25 " ..	72·46	27·32	0 20	0·02
25 " 30 " ..	45·01	54·07	0·87	0·05
30 " 35 " ..	25·65	72·04	2·18	0·13
35 " 40 " ..	15·92	79·54	4·38	0·16
40 " 45 " ..	10·29	81·84	7·75	0·12
45 " 50 " ..	6·91	80·93	12·04	0·12
50 " 55 " ..	5·55	77·14	17·27	0·04
55 " 60 " ..	4·70	71·82	23·42	0·06
60 " 65 " ..	4·34	65 30	30·29	0 07
65 " 70 " ..	4·21	54·66	41·09	0·04
70 " 75 " ..	4 16	43·53	52·31	..
75 " 80 " ..	5·13	30·75	64·12	..
80 " 85 " ..	3·07	20 40	76·53	..
85 years and upwards ..	3·86	15·13	81·01	..

Conjugal Condition of Chinese.

Of 2,825 male Chinese living in the colony, 61 were stated as married and 13 widowed. The instruction on the census schedule was that Chinese not having wives in this colony or any Australian State should be returned as unmarried. Of 32 Chinese females, 18 were returned as married, 12 of the rest being young people under 14 years of age, and 2 from 25 to 29 years old. The half-caste Chinese are referred to on page 136.

Bachelors and Spinsters.

Of 272,685 unmarried males of specified ages, 99,844 were over 20 years of age, and, of 230,284 unmarried females, 103,416 were found to be over 15 years; the excess of spinsters over bachelors was therefore 3,572. Accepting the above as the marriageable ages, the number of bachelors to every 100 spinsters was 97 (nearly).

That a process of equalisation in the numbers of bachelors and spinsters has been going on steadily during past years is proved by the results of previous censuses.

Number of Bachelors aged 20 Years and upwards to every 100 of Spinsters aged 15 and upwards.

Census 1874	238
" 1878	191
" 1881	162
" 1886	123
" 1891	105
" 1896	98
" 1901	97

Husbands and Wives.

The number of husbands of specified ages was 118,401, and of wives 117,746, giving an excess of husbands over wives amounting to 655. This excess of husbands is almost entirely accounted for by the arrival during the last few years of a number of Austrian gum-diggers in the Auckland Provincial District—married men, who did not bring their wives with them.

Widowers and Widows.

The widowers of specified ages numbered 10,641, and the widows 17,881, being a proportion of 60 widowers to every 100 widows. At the census of 1896 the proportion was 62 to every 100 widows.

Divorced Persons.

Four hundred and four persons—namely, 255 men and 149 women—were entered on the census schedules as being divorced. These numbers are not likely to represent fully the actual facts, but are interesting as, no doubt, an approximation to the truth.

Marriage Rates in Australasia.

It was remarked in the report on the census of 1896 that the marriage rate in New Zealand, from being the highest in Australasia, had fallen among the lowest, and that the same process had been going on in regard to birth rates. The lapse of five years places New Zealand in a much better position, the marriage rate being only slightly lower than in Tasmania and Western Australia, but higher than in Victoria, New South Wales, South Australia, and Queensland.

Marriage Rates per 1,000 of Population.

	1874.	1886.	1891.	1895.	1900.
Queensland	8·62	8·67	7·18	6·23	6·88
New South Wales ..	7·70	7·99	7·39	6·35	7·38
Victoria	6·33	7·84	7·69	6·00	6·96
South Australia	8·00	6·24	7·31	5·88	6·50
Western Australia ..	6·96	7·98	8·00	6·83	10·27
Tasmania	6·83	7·26	6·63	5·32	7·71
New Zealand	8·81	5·99	6·04	5·94	7·67

In the year 1880, New Zealand had the highest birth rate in Australasia, but since 1887 the position has been exactly the opposite.

Birth Rates per 1,000 of Population.

	1887.	1891.	1895.	1900.
Queensland	38·09	36·35	32·85	30·21
New South Wales	36·42	34·50	30 66	27·43
Victoria	32·39	33·57	28·57	25·82
South Australia	34·63	33·92	30·23	25·78
Western Australia	37·34	34·85	25·62	31·46
Tasmania	33·87	33·37	30·10	28·25
New Zealand	32·09	29·01	26·78	25·60

Half-caste Chinese.

The schedules showed that at the time of the census 43 European women were married to Chinese, the result of such unions being 106 children (60 males and 46 females). If these half-caste children be added to the number of pure-bred Chinese in the colony the result would be,—

	Persons.	Males.	Females.
Chinese	2,857	2,825	32
Chinese half-castes	106	60	46
	2,963	2,885	78

SECTION V.—AGES: MINORS, ADULTS, AND OLD PEOPLE.

The number of persons under 21 years in March, 1901, was 359,723, and over 21 years 412,356, besides 640 unspecified as to age, but nearly all adults.

Comparison of the population under and over 21 years for 1886, 1891, 1896, and 1901, shows that the number over 21 years is increasing in proportion to the population at all ages.

PROPORTIONS PER CENT. OF PERSONS—ALL AGES.

	1886.	1891.	1896.	1901.
Under 21 years	53·47	52·46	49·94	46·59
Over 21 years	46·53	47·54	50·06	53·41
	100·00	100·00	100·00	100·00

The males under 21 years in 1901 were 181,753, and the adults 223,807, leaving 432 unspecified as to age, but of whom few were children. The females under 21 numbered 177,970, and adults 188,549, leaving 208 unspecified. The proportions per cent. of population over 21 years of age of each sex are higher for 1901 than for 1896.

PROPORTIONS PER CENT.

	Males.		Females.	
	1896.	1901.	1896.	1901.
Under 21 years	47·72	44·77	52·39	48·53
Over 21 years	52·28	55·23	47·61	51·47
	100·00	100·00	100·00	100·00

The proportion of aged people in the colony increases with time, and the progression is very important to notice. The figures for nine census years, extending from 1867 to 1901 are quoted:—

PERSONS 65 YEARS AND UPWARDS PER CENT. OF POPULATION.

1867 ..	0·86	1878 ..	1·29	1891 ..	2·29
1871 ..	1·08	1881 ..	1·41	1896 ..	2·95
1874 ..	1·22	1886 ..	1·81	1901 ..	4·06

The numbers at the age-periods most often in request may be described thus: Infancy and extreme youth (under 5 years)—males, 44,324; females, 42,482: School age (5 to 15 years)—males, 86,414;

females, 84,547: Women at the reproductive age (15 to 45 years)—183,387: The athletic age (21 to 40 years)—males, 121,939; females, 115,099: The militia age (17 to 55 years)—males only, 212,065: The elderly period of life (55 to 65 years)—males, 26,514; females, 17,980: Old-age (65 years and upwards)—males, 19,218; females, 12,135.

The total number of males liable to be called out for service in the militia in March, 1901, was, in round numbers, 129,000, consisting of all males between 17 and 40 years, with the unmarried between 40 and 55 years, less the exemptions, numbering about 37,880 persons. They are classified as under:—

Class I.	Unmarried, between 17 and 30 years	86,327
Class II.	Married, between 17 and 30 years	15,407
	Unmarried, between 30 and 40 years	18,901
Class III.	Married, between 30 and 40 years	34,545
	Unmarried, between 40 and 55 years	11,700
		166,880
	Deduct exemptions	37,880
		129,000

Of married men between 40 and 55, there were 43,130.

Age, and Length of Residence.

For a person not born in New Zealand, the householder was required to state on the census schedule the length of his or her residence therein in years, and from the information thus obtained, a table has been compiled showing the number of persons at each year of age, and the length of their residence in the colony, and from this the following figures, which will no doubt be found interesting, are taken:—

On the 31st March, 1901, there were in New Zealand 26,563 persons of 65 years of age and upwards who had been twenty-five years and over resident in the colony, and, at the same time, no less than

3,537	persons	64	years of age and over,	resident 24	years and upwards.
3,602	"	63	" "	23	"
3,831	"	62	" "	22	"
3,532	"	61	" "	21	"
5,978	"	60	" "	20	"
4,180	"	59	" "	19	"
4,676	"	58	" "	18	"
4,567	"	57	" "	17	"
5,277	"	56	" "	16	"
5,030	"	55	" "	15	"

In addition to the above, there were 925 persons of 65 years and over whose length of residence was not specified, 71 persons who had resided twenty-five years and over in the colony whose ages were not stated, and 273 adults unspecified both as to age and length of residence, as well as 163 adults born in New Zealand whose ages were not given.

Aliens are included in the foregoing figures, but Maoris are excluded. There were 11,615 foreign subjects (of all ages) in New Zealand on the 31st March, 1901.

Of the New Zealand born, 171 had reached or passed the age of 65 years at the time of the census; 22 were 64 years old; 43 were 63; 42 were 62; 43 were 61; 130 were said to be 60; 167 were 59; 243 were 58; 321 were 57; 386 were 56; and 410 were 55 years old. These have been included in the figures previously given.

SECTION VI.—OCCUPATIONS OF THE PEOPLE.

The Classification.

At a Conference of Statisticians of the Australasian Colonies,* held in Sydney, February, 1900, a series of resolutions was passed, and a form of schedule agreed to, with the view of securing the uniformity so necessary for comparative purposes in system and heads of inquiry. The classification of occupations used in 1896 by this colony was, with minor amendments, generally adopted. This classification has been described as one devised "as a means of overcoming the great difficulties with which the systematic grouping of the occupations of the people of a country has always been found to be attended," and may fairly be claimed to have attained its purpose.

The old classification of Dr. Farr, in use prior to 1891, purported to divide the population so as to distinguish the commercial from the industrial class; but, in allotting the various occupations to the different classes, the principle adopted was that of grouping all workers and dealers in different matters together according to the material *dealt in* or *worked upon*, and placing the whole in the industrial class. Thus the dealers, who are really commercial, went to swell the number of the industrial at the expense of the commercial class. General labourers were cast out of the industrial into the indefinite class, merely because the material on which they worked was not stated, &c. The classification used in 1891 and 1896, while preserving Farr's professional class nearly intact, transfers, among other changes, a large number of women and children from the domestic to the dependent class, and completes the commercial class by including "trade" among the *agorici* of Farr. The industrial class now consists of part of what was assigned to it by Farr, but includes general labourers. Miners and other primary producers are placed with the agricultural and pastoral class, as being engaged in obtaining raw materials from natural sources. The indefinite class is greatly reduced in number, and the class styled "dependent" introduced. A Conference (held in 1890) had agreed to a proposal for

* The names of the members of the Conference were as under: T. A. Coghlan, Government Statistician, New South Wales; J. Hughes, Registrar-General, Queensland; L. H. Sholl, Under-Secretary and Government Statist, South Australia; M. A. C. Fraser, Registrar-General, Western Australia; R. M. Johnston, Government Statistician and Registrar-General, Tasmania; E. J. von Dadelszen, Registar-General, New Zealand.

distinguishing "employers" from "employed"—a division first attempted in New Zealand, at the suggestion of the writer of this report, on the occasion of the census of 1886, and renewed in 1891 and 1896. The importance of affording the means of distinguishing persons in business from wage-earners is obvious, besides being absolutely essential to an improved classification of occupations.

It was also arranged for bringing out the occupations of the people in seven groups of ages, instead of merely distinguishing the number of each sex under and over 20 years of age as was done prior to 1891. (The full details will be found in the Census volume.)

The full description of the arrangement of occupations in the eight classes used under the new method is—

Definition of Principal Classes.

Section A.—Breadwinners.

I. Professional.—Embracing all persons, not otherwise classed, mainly engaged in the government and defence of the country, and in satisfying the moral, intellectual, and social wants of its inhabitants.

II. Domestic.—Embracing all persons engaged in the supply of board and lodging, and in rendering personal services for which remuneration is usually paid.

III. Commercial.—Embracing all persons directly connected with the hire, sale, transfer, distribution, storage, and security of property and materials.

IV. Transport and Communication.—Embracing all persons engaged in the transport of persons or goods, or in effecting communication.

V. Industrial.—Embracing all persons, not otherwise classed, who are principally engaged in various works of utility, or in specialities connected with the manufacture, construction, modification, or alteration of materials so as to render them more available for the various uses of man, but excluding, as far as possible, all who are mainly or solely engaged in the service of commercial interchange.

VI. Agricultural, Pastoral, Mineral, and other Primary Producers.—Embracing all persons mainly engaged in the cultivation or acquisition of food products, and in obtaining other raw materials from natural sources.

VII. Indefinite.—Embracing all persons who derive incomes from services rendered, but the direction of which services cannot be exactly determined.

Section B.—Dependents: Non-Breadwinners.

VIII. Dependents.—Embracing all persons dependent upon relatives or natural guardians, including wives, children, and others not otherwise engaged in pursuits for which remuneration is paid; and all persons depending upon private charity, or whose support is a burden on the public revenue.

In the professional class are included persons described as "officers of Government"; but the numbers given under this heading do not represent the whole number employed by the Government, the principle adopted having been to complete the other groups where the scheme of classification required it, rather than to show completely all persons paid by Government. Thus,

Postal and Telegraph officers are classified in Class IV., "Transport and Communication." Railway employees are similarly dealt with. It is highly important that persons making use of the tabulated results of the information as to occupations should be aware of and bear in mind the above facts.

The numbers under "Commercial" and "Industrial" include all persons whose occupations were sufficiently defined to enable them to be classified in connection with the business or industry in which they are engaged. Many, chiefly those whose employment was of the nature of unskilled clerical assistance, while entering "clerk" under the heading "Occupation," did not state in what trade or industry they were employed. These, of course, could not be allotted to any special industry. Those engaged as agents or assistants in any occupation belonging to Classes III. to VII. have been, generally speaking, included with the principals. All persons stated as both manufacturers and dealers or sellers have been classed as makers only, under Class V. Persons out of employment are included under their ordinary or former occupations. Inmates of asylums, industrial schools, and refuges, together with all persons in gaols, have not been classed according to their ordinary occupations, but in Class VIII., as part of the dependent population.

The difficulty of tabulating the occupations of the people shown in the census is certainly lessened by the introduction of the card system; but there remains an unsatisfactoriness in the work on account of the different ways in which people return themselves when their occupation is virtually the same, and the number of instances in which unskilled labour is not defined as having to do with the industry on which it is temporarily employed. These causes prevent the published results from being what they ought to be, even with perfect care in the compilation-work. The basis of such work is often enough faulty or incomplete, and it is impossible to remedy the defect. One man may be a "carter at brewery," and returns himself accordingly. Another omits the words "at brewery," and thus the total number of persons employed in the brewing business becomes deficient. As continual instances of these irregularities are found, it arises that the census industrial statistics often differ materially as to "hands employed" from the results brought out under the head of "Occupation" in regard to abourers and others attached to various industries.

Numbers and Proportions in the Classes.

The population, specified as to occupation, is divided into two sections:—

	Totals.	Males.	Females.
Breadwinners	340,230	274,559	65,671
Dependents, or non-breadwinners ..	432,149	131,164	300,985
Occupation not stated	340	269	71

The dependent population consists chiefly of wives, relatives, and others employed in household duties but unpaid, children, persons supported by charity, &c. Its proportion to the whole increases with the process going on of equalisation in numbers of the sexes.

The male breadwinners were more than twice as numerous as the male dependents, who were mostly under fifteen years of age; but the female dependents were nearly five times as many as the breadwinners of that sex.

Breadwinners are divided into the seven classes previously alluded to :—

Primary Producers.—Males, 108,007; females, 3,914. This is the most important class numerically. It includes persons engaged in agricultural and pastoral pursuits, fishing, and mining.

Males 26·62, females 1·07 per cent. of population of either sex.

Industrial.—Males, 84,874; females, 16,310: persons engaged in manufacture or other processes where materials are employed combined.

Males 20·92, females 4·45 per cent.

Commercial.—Males, 34,409; females, 5,528.

The commercial group forms 8·48 per cent. of the male, and 1·51 per cent. of the female population.

Transport and Communication.—Males, 21,265; females, 485: persons engaged in the transport of passengers and goods, and in effecting communication.

Males 5·24, females 0·13 per cent.

Professional.—Males, 14,549; females, 8,960. These are persons, not otherwise classed, engaged in Government, defence, law and order, or ministering to religion, charity, health, education, art, science, or amusement.

Males 3·59, females 2·44 per cent.

Domestic (but directly earning money).—Males, 6,542; females, 27,852: persons supplying board and lodging, or personal services for which payment is rendered.

Males 1·61, females 7·60 per cent.

Indefinite.—Males, 4,913; females, 2,622: persons living on incomes earned in the past, or indefinitely described.

Males 1·21, females 0·71 per cent.

It will be observed from the appended table of occupations, that no less than 32·33 per cent. of the male population and 82·09 per cent. of the females are dependent. These consist of 127,916 males and 298,727 females dependent upon natural guardians; and 3,248 males and 2,258 females dependent upon the State, or upon public or private support. The greater number of those dependent upon natural guardians are scholars and students. There are also a large number of dependent relatives who were not stated to be performing domestic duties, and, of females, many persons performing domestic duties for which remuneration is not paid.

The population of each class, and the proportion per cent. of the total population, are:—

Occupations.	Numbers.			Proportions per Cent.		
	Persons.	M.	F.	Persons.	M.	F.
Total population	772,719	405,992	366,727	100·00	100·00	100·00
Section A.—Breadwinners.						
Class I. Professional	23,509	14,549	8,960	3·04	3·59	2·44
„ II. Domestic	34,394	6,542	27,852	4·45	1·61	7·60
„ III. Commercial—						
Sub-class A. Property and Finance	5,631	5,046	585	0·72	1·24	0·16
Sub-class B. Trade ..	33,438	28,500	4,938	4·31	7·03	1·35
Sub-class C. Storage ..	868	863	5	0·10	0·21	0·00
„ IV. Transport and Communication	21,750	21,265	485	2·82	5·24	0·13
„ V. Industrial	101,184	84,874	16,310	13·10	20·92	4·45
„ VI. Agricultural, Pastoral, and other Primary Producers—						
Sub-class A. Agricultural	67,812	65,723	2,089	8·78	16·20	0·57
Sub-class B. Pastoral ..	21,410	19,600	1,810	2·77	4·83	0·50
Sub-class C. Mineral ..	17,816	17,808	8	2·31	4·39	0·00
Sub-class D. Other Primary Producers	4,883	4,876	7	0·63	1·20	0·00
„ VII. Indefinite	7,535	4,913	2,622	0·98	1·21	0·71
Section B.—Non-Breadwinners (Dependents).						
„ VIII. Dependents—						
Sub-class A. Dependent on natural guardians	426,643	127,916	298,727	55·23	31·53	81·47
Sub-class B. Dependent upon the State, or upon public or private support	5,506	3,248	2,258	0·72	0·80	0·62
Occupations not stated	340	269	71	..	..	..

Employers and Employed.

The breadwinners of the colony are also classified according to the grade of their occupations, by which means the entire population can be brought under six heads:—

	Males.	Per Cent. of Breadwinners.	Females.	Per Cent. of Breadwinners.
Employers	34,002	12·39	2,010	3·06
Independent workers ..	47,317	17·23	8,750	13·32
Wage-earners	166,432	60·62	48,088	73·23
Unemployed	8,467	3·08	1,359	2·07
Relatives assisting, and not specified	18,341	6·68	5,464	8·32
Breadwinners	274,559	100·00	65,671	100·00
Dependents	131,164	..	300,985	..
Not stated	269	..	71	..
Totals	405,992	..	366,727	..

The proportion of the male breadwinners who are employers (12·39 per cent.) is slightly higher than it was in 1896 (12·02 per cent.). On the female side the proportion of employers was 3·06 per cent. at both censuses. Male wage-earners, employed or unemployed, were 63·70 per cent., against 61·48 per cent. in 1896. Female wage-earners, whether in work or not, were 75·30 per cent. in 1901, against 75·01 per cent. in 1896, indicating a growing use of female labour.

Grades of Occupations.

Details of the numbers and proportions of persons of each sex (in the different classes of occupation) divided according to grade, *i.e.*, employers, independent workers, wage-earners, unemployed, and relatives assisting, will be found on pp. 58 and 59 of the Registrar-General's Report on the Census of 1901.

SECTION VII.—SICKNESS AND INFIRMITY.

An instruction was given in the census household schedule that in regard to all persons "laid up or unable to follow their usual occupation," by reason of illness or accident, the fact was to be stated when the form was being filled up. And by means of the information thus obtained the proportion of persons incapacitated from work on the day of the census has been ascertained, and is shown in the tables according to age-periods.

Besides persons suffering from sickness or accident, those afflicted with certain infirmities are also distinguished. These include the "deaf-and-dumb," "blind," "lunatics," "idiots," "epileptics," "paralytic," "crippled and deformed," "debilitated and infirm," and "deaf only."

The result of the investigation under this head shows that 9·28 persons in every 1,000 were suffering from sickness or accident on the 31st March, 1901, using the word "sickness" to mean inability to work on that day; and that, besides these, there were 7·20 persons in every 1,000 who were either affected with blindness, or deaf-and-dumb, lunatic, idiot, epileptic, &c., the proportion per 1,000 persons living stated to be suffering from sickness, accident, and infirmities being 16·48: for males, 20·09 per 1,000 living, and for females, 12·49.

The sickness and infirmity of the males is thus found to be higher than that of the females, as was the case in 1896, when the proportion was 20·92 for males and 14·36 for females.

The numbers and proportions of males and females suffering from sickness, accident, or specified infirmity in this colony, according to age-periods, will be found tabulated in the Report on the Census. In regard to males, after the period 35–40 the proportion of sickness rises steadily at each quinquennium of age; while under accident the proportion is highest at the period of 70–75 years. The rate of sickness per 1,000 males living at 35–40 years was 5·68, and this increased to 18·38 at 55–60, to 54·62 at 65–70, and to 70·18 at 80 and upwards. In regard to females, the sickness is not so great at 40–45 years as at 35–40, but from this point it increases, and from 50–55 very rapidly, though the numbers on which the proportions are based are admittedly small from this age onwards. The rates per 1,000 were 6·97 at 35–40 years, 13·95 at 55–60, and 47·82 at 80 years and upwards.

Females are proved to be very much less liable to accident than males, the proportions being 0·63 per 1,000 of females, and 3·03 per 1,000 of males; or better stated for this purpose, 6·27 per 10,000 females and 30·28 per 10,000 males. As with sickness, the proportions increase with advancing age: for instance, among males, 3·37 per 1,000 were suffering from accident at the group 20–25 years, 3·75 per 1,000 at 40–45, 10·24 at 65–70, and 12·90 at the group 70–75 years. Among females the highest proportion per 1,000 is found at 75–80 years, being a rate of 5·36, or 53·60 per 10,000 living.

Sickness and infirmity can be compared for New Zealand, in respect of persons over 15 years of age, with the results of the census of 1896 and previously. The proportions are:—

PROPORTION PER 1,000 PERSONS OVER 15 YEARS.

	Sickness and Accident.	Specified Infirmities.	Total Sickness and Infirmity.
Census 1874	12·64	5·32	17·96
" 1878	11 16	5·70	16·86
" 1881	11·20	7·22	18·42
" 1886	12·61	7·82	20·43
" 1891	12·78	11·08	23·86
" 1896	14·28	11·41	25·69
" 1901	12·72	10.29	23·01

Specified Infirmities.

The total of these under the various heads amounted to 5,574 of both sexes and all ages. The males were 3,466, and the females 2,108, the proportions for every 10,000 persons being 71·98: for males 85·21, and for females 57·35 per 10,000 of each sex respectively. These infirmities are specially treated of one by one in the succeeding paragraphs.

Deaf and Dumb.

There were 226 persons—134 males and 92 females—returned as deaf and dumb, or dumb only: of these 45 were inmates of the Sumner Institution, leaving 181 deaf-mutes who were living at home or in some other private residence. The total shows a proportion of 2·91 persons per 10,000 living, against 2·86 ascertained in 1896. The proportions of the deaf and dumb taken according to the sexes did not differ much. The figures are given for six census years.

DEAF AND DUMB (IN SEXES).—PROPORTIONS PER 10,000 OF POPULATION.

	Males	Females.		Males.	Females.
Census 1878 ..	2·25	2·18	Census 1891 ..	2·80	2·49
" 1881 ..	2·23	2·45	" 1896 ..	2·99	2·71
" 1886 ..	2·37	2·22	" 1901 ..	3·28	2·51

The numbers at the census of 1901 for quinquennial age-periods are:—

NUMBERS OF THE DEAF AND DUMB AT LAST CENSUS.

	M.	F.		M.	F.
All ages	134	92	40 years to 45 years ..	5	5
	—	—	45 „ 50 „ ..	6	1
Under 5 years	..	..	50 „ 55 „ ..	3	5
5 years to 10 years ..	18	16	55 „ 60 „ ..	5	1
10 „ 15 „ ..	32	14	60 „ 65 „ ..	3	1
15 „ 20 „ ..	18	10	65 „ 70 „ ..	..	1
20 „ 25 „ ..	16	8	70 „ 75 „ ..	..	..
25 „ 30 „ ..	8	12	75 „ 80 ..	1	2
30 „ 35 „ ..	12	8	80 „ and upwards ..	..	..
35 „ 40 „ ..	6	8	Unspecified	1	..

The highest numbers are shown at the ages 10 to 15.

The occupations (past or present) of the deaf and dumb were returned in 1901 as under:—

OCCUPATIONS (PAST OR PRESENT) OF THE DEAF AND DUMB.

	Persons.	M. Under 20.	M. Over 20.	F. Under 20.	F. Over 20.
Draughtsman ..	1	..	1	..	..
Hotel servant ..	1	..	1	..	..
Domestic servant	4	1	..	..	3
Charwoman ..	1	..	..	..	1
Milkman ..	1	..	1	..	..
Storekeeper's assistant ..	1	..	1	..	..
Printer's assistant	1	1	..	..	..
Saddler ..	2	..	2	..	..
Tanner ..	1	..	1	..	..
Cabinetmaker ..	1	1	..	..	..
Tailor	2	..	2	..	..
Dressmaker ..	6	..	..	2	4
Bootmaker ..	1	..	1	..	..
Labourer at freezing-works ..	1	1	..	..	..
Brewer's assistant	1	..	1	..	..
Fellmonger ..	1	..	1	..	..
Carpenter ..	4	1	3	..	..
Labourer ..	4	1	3	..	..
Farmer ..	4	..	4	..	..
Gardener ..	3	..	3	..	..
Farm-labourer ..	13	1	12	..	..
Sheep-farmer ..	1	..	1	..	..
Shepherd ..	1	..	1	..	..
Dairy-farmer ..	4	..	4	..	..
Independent means ..	2	..	2	..	..
No occupation ..	8	..	8	..	..
Domestic duties	38	..	..	1	37
Scholar, private school ..	2	1	..	1	..
Scholar, government school ..	8	6	..	2	..
Receiving tuition at home ..	3	2	..	1	..
Dependent on relatives ..	41	20	5	11	5
Inmate of deaf and dumb institution ..	45	24	1	20	..
Industrial school	1	..	..	1	..
Occupation not stated ..	18	8	7	1	2
	226	68	66	40	52

Blind.

There were 297 males and 156 females, making a total of 453 persons returned as blind, including 63 who were given in the schedules as "nearly" or "partly" blind. Of the above total

number, 15 were inmates of the Jubilee Institute for the Blind at Auckland. It would thus appear that only one out of every thirty persons in the colony who suffered from blindness had been received into the institution. The number of blind persons in 1896 was 344. The proportions in every 10,000 of population show a continuous rise at successive censuses, and that there is more blindness amongst males than females.

PROPORTIONS OF BLIND TO EVERY 10,000 PEOPLE.

	Persons.	Males.	Females.
1874	2·34	2·45	2·18
1878	2·56	2·42	2·73
1881	2·82	2·93	2·68
1886	3·22	3·65	2·70
1891	4·37	4·91	3·74
1896	4·90	5·69	4·01
1901	5·87	7·32	4·26

The proportion of the blind per 10,000 persons living in the past has been: for England, about 8·79; for Ireland, 11·30; for Scotland, 6·95; for Germany, 7·93; for France, 8·37; and for Italy, 7·63. For the Australian States the figures are: Victoria, 8·72; New South Wales, 6·59; Australian Continent, 7·38.

The number of the blind in quinquennial periods of age is stated for each sex. Of 297 males, 100 were under and 197 upwards of 50 years old. Of 156 females, 63 were under 50, and 93 over that age.

NUMBERS OF THE BLIND AT AGE-PERIODS.

	Persons.	M.	F.		Persons.	M.	F.
All ages	453	297	156	40 years to 45 years	18	11	7
				45 „ 50 „	22	10	12
Under 5 years ..	3	..	3	50 „ 55 „	23	16	7
5 years to 10 years	16	9	7	55 „ 60 „	45	32	13
10 „ 15 „	17	11	6	60 „ 65 „	37	22	15
15 „ 20 „	15	11	4	65 „ 70 „	74	53	21
20 „ 25 „	20	10	10	70 „ 75 „	46	28	18
25 „ 30 „	14	9	5	75 „ 80 „	36	25	11
30 „ 35 „	17	13	4	80 and upwards	29	21	8
35 „ 40 „	21	16	5				

Of the total number of the blind, 453 persons, there were 43 in regard to whom no information as to occupation is given on the household schedule, 71 (females) were returned as engaged in domestic duties, 15 persons as inmates of the blind institute, 10 as dependent relatives, 132 as of no occupation, 21 as labourers, 21 as farmers, 9 as farm labourers, 6 as dairy farmers, 5 as sheep-farmers, 8 as carpenters, 10 as pensioners, 6 of independent means, and the rest (96) of various occupations in small numbers each. A complete statement is added, in regard to which it must be remarked that many of the occupations are evidently the past occupations of persons whom blindness has prevented from continuing to work at their usual calling.

OCCUPATIONS (PAST OR PRESENT) OF THE BLIND.

	Persons.	Male. Under 20.	Male. Over 20.	Female. Under 20.	Female. Over 20.
Barrister (not in practice)	1	..	1	..	..
Surgeon	1	..	1	..	..
Teacher of the blind	2	..	2	..	..
School-teacher	1	..	1	..	..
Musician	3	..	3	..	..
Street musician	1	..	1	..	..
Organ-grinder	2	..	2	..	..
Comedian	1	..	1	..	..
Boarding-house keeper	2	..	2	..	..
Hotelkeeper	1	..	1	..	..
Domestic servant	1	..	..	..	1
Cook	1	..	1	..	..
Capitalist	2	..	2	..	..
Insurance agent	1	..	1	..	..
Proprietor of houses	4	..	4	..	..
Newsvendor	2	..	2	..	..
Butcher	1	..	1	..	..
Assistant butcher	2	..	2	..	..
Fish-hawker	1	..	1	..	..
Fruiterer	2	..	2	..	..
Grocer	3	..	3	..	..
Seed merchant	1	..	1	..	..
Hawker	1	..	1	..	..
Storekeeper	2	..	2	..	..
Commercial traveller	2	..	2	..	..
Cab proprietor	1	..	1	..	..
Mariner	1	..	1	..	..
Waterman	1	..	1	..	..
Lumper	3	..	3	..	..
Compositor	1	..	1	..	..
Piano-tuner	3	..	3	..	..
Basketmaker	4	..	4	..	..
Saddler	1	..	1	..	..
Shipwright	2	..	2	..	..
Cabinetmaker	1	..	1	..	..
Boot- and shoemaker	4	..	4	..	..
Stonemason	2	..	2	..	..
Carpenter	8	..	8	..	..
Plumber	1	..	1	..	..
Painter	1	..	1	..	..
Contractor	1	..	1	..	..
Labourer	21	..	21	..	..
Farmer	21	..	20	..	1
Farm labourer	9		9	..	..
Gardener	1	..	1	..	..
Market-gardener	2	..	2	..	..
Settler	1	..	1	..	..
Dairy-farmer	6	..	5	..	1
Sheep-farmer	5	..	4	..	1
Shepherd	1	..	1	..	..
Fisherman	1	..	1	..	..
Bushman	1	..	1	..	..
Gum-digger	3	..	3	..	..
Miner	1	..	1	..	..
Miner, coal	1	..	1	..	..
Miner, quartz	3	..	3	..	..
Miner, alluvial	4	..	4	..	..
Inspector of minerals	1	..	1	..	..
No occupation	132	11	80	2	39
Independent means	6	..	4	..	2
Pensioner	10	..	9	..	1
Annuitant	3	..	3	..	..
Domestic duties	71	..	..	3	68
Scholar, Government school	2	2	..	..	..
Scholar, private school	1	1	..	..	..
Receiving tuition at home	2	1	..	1	..
Dependent on relative	10	3	..	7	..
Inmate of Blind Institute	15	8	..	7	..
Occupation not stated	43	5	16	..	22
Totals	453	31	266	20	136

LUNACY.

The lunatics enumerated were 2,675 persons, 1,599 males and 1,076 females, nearly all of whom were inmates of the asylums for the insane in the colony. Departmental returns show 2,773 persons (including 22 Maoris, 10 males and 12 females) as the total number of inmates on the 31st December, 1901.

Comparison with the results of previous censuses shows a con-

tinually increasing proportion of lunatics to the population in respect of either sex, and that there is considerably more lunacy among the men than women.

LUNATICS.—PROPORTIONS PER 10,000 OF POPULATION.

	Persons.	Males.	Females.
Census 1874	19·93	23·28	15·48
„ 1878	20·85	25·07	15·54
„ 1881	22·86	27·30	17·43
„ 1886	26·50	31·03	21·18
„ 1891	27·82	31·28	23·92
„ 1896	31·13	35·70	26·02
„ 1901	34·47	39·23	29·19

The number of males who were lunatics was highest at the period 45–50 years, and the females at 40–45, as will be found by the following statement :—

LUNATICS.—NUMBERS AT QUINQUENNIAL AGE-PERIODS.

	Persons.	M.	F.
All ages..	2,675	1,599	1,076
Under 5 years	2	1	1
5 years to 10 years	5	3	2
10 „ 15 „	19	11	8
15 „ 20 „	43	22	21
20 „ 25 „	114	63	51
25 „ 30 „	186	108	78
30 „ 35 „	245	141	104
35 „ 40 „	257	145	112
40 „ 45 „	312	176	136
45 „ 50 „	333	213	120
50 „ 55 „	296	177	119
55 „ 60 „	298	191	107
60 „ 65 „	244	139	105
65 „ 70 „	162	109	53
70 „ 75 „	88	60	28
75 „ 80 „	35	21	14
80 years and upwards	22	11	11
Unspecified	14	8	6

The proportion of lunatics per 10,000 males living at the above age-periods was only 5·18 at 15–20 years, but had advanced to 59·67 at 35–40 years, and reached its maximum at the period 55–60, when the proportion was 139·30. In the case of females, the proportion rose to a maximum of 130·97 at 60–65.

In 1900 one person in every 288, exclusive of Maoris, in New Zealand was afflicted with lunacy.

IDIOCY.

The number of idiots of both sexes enumerated in the census was 105, against 144 in 1896 ; the proportion to 10,000 of population being 1·36 against 2·02 at the previous census. As with lunacy, the proportion of idiocy amongst the males (1·43 per 10,000) is higher than amongst the females (1·28).

SECTION VIII.—EDUCATION OF THE PEOPLE.

THE replies given at the Census by householders showed that in every 100 persons living (excluding Chinese), 82·78 per cent. could read and write, 1·95 could read only, and 15·27 were unable to read. The proportion per cent. unable to read fell from 23·72 in 1878 to 21·19 in 1886, to 16·51 in 1896, and, further, to 15·27 in 1901. Of those who could read only, the proportion diminished from 6·76 in 1878 till in 1901 it stood at 1·95 per cent. The following shows the percentages at each census period :—

Year.	Read and Write			Read only.			Cannot Read.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females
1878 ..	69·52	72·11	66·33	6·76	5·91	7·80	23·72	21·98	25·87
1881 ..	71·32	73·31	68·94	5·63	5·01	6·39	23·05	21·68	24·67
1886 ..	74·01	75·40	72·41	4·80	4·36	5·31	21·19	20·24	22·28
1891 ..	77·27	77·97	76·48	3·97	3·74	4·24	18·76	18·29	19·28
1896 ..	80·60	81·06	80·09	2·89	2·71	3·08	16·51	16·23	16·83
1901 ..	82·78	83·08	82·44	1·95	1·81	2·10	15·27	15·11	15·46

Besides the improvement in the degree of education shown above, which is observed in respect of females as well as males, it will be noticed that whereas the difference in the percentage able to read and write is very considerably in favour of the male sex for the year 1878, the proportions approximate more closely at each successive census year, until in 1901 there are found to have been 82·44 per cent. of the female sex who could read and write, against 83·08 of males. The education of the females, taking as a standard the knowledge of reading and writing, is thus almost equal to that of the males. But with a system of free and compulsory education this would be expected in time, and the census results have no longer the degree of importance or interest they had years ago.

It is in considering the proportions of the population at different age-periods that the improvement in education is even more clearly proved, as seen by reference to the table dealing with those subjects.

Here it is found that in 1901, of persons at the age-period 10–15 years, 99·24 per cent. were able to read and write, while 0·34 per cent. could merely read, and 0·42 per cent. were unable to read. The proportion who could not read increased slowly with each succeeding quinquennial period of age, until at 50–55 years it stood at 3·23 per cent. At 75–80 years the proportion was 6·45, and at 80 and upwards it had advanced to 7·68. Similarly, the proportion of persons who could read only increased from 0·34 at 10–15 years to 1·86 at the period 50–55, and again to 7·75 at 80 and upwards. The better education of the people at the earlier ages is thus exhibited. The numbers upon which the above proportions are based are :—

NUMBERS (EXCLUDING CHINESE).

Ages.	Persons.				Males.				Females.			
	Read and Write.	Read only.	Cannot Read.	Education unknown.	Read and Write.	Read only.	Cannot Read.	Education unknown.	Read and Write.	Read only.	Cannot Read.	Education unknown.
All ages	632,936	14,857	116,821	5,248	332,560	7,223	60,484	2,900	300,376	7,634	56,337	2,348
Specified ages	632,538	14,847	116,798	5,067	332,318	7,217	60,472	2,753	300,220	7,630	56,326	2,311
Specified ages above 5 years	632,538	14,570	30,350	4,996	332,318	7,082	16,324	2,720	300,220	7,488	14,026	2,276
Under 5 years	..	277	86,448	68	..	135	44,148	33	..	142	42,300	35
5 years to 10 years ..	53,408	9,181	21,647	1,491	26,528	4,803	11,206	771	26,880	4,378	10,441	720
10 " 15 " ..	84,316	287	357	258	42,586	164	210	137	41,730	123	147	121
15 " 20 " ..	84,167	97	351	195	42,041	58	238	115	42,126	39	113	80
20 " 25 " ..	82,210	136	494	273	40,570	90	342	159	41,640	46	152	114
25 " 30 " ..	67,458	158	478	278	34,564	94	325	162	32,894	64	153	116
30 " 35 " ..	55,721	177	489	347	28,856	100	315	192	26,865	77	174	155
35 " 40 " ..	44,020	277	591	311	23,342	129	357	155	20,678	148	234	156
40 " 45 " ..	37,065	347	726	337	20,373	149	421	185	16,692	198	305	152
45 " 50 " ..	31,059	461	780	342	17,812	176	459	200	13,247	285	321	142
50 " 55 " ..	25,299	495	860	284	14,185	171	436	156	11,114	324	424	128
55 " 60 " ..	21,670	613	850	280	12,596	231	463	160	9,074	382	387	120
60 " 65 " ..	18,871	661	825	231	11,729	243	481	118	7,142	418	344	113
65 " 70 " ..	14,156	767	1,001	177	9,099	314	564	97	5,057	453	437	80
70 " 75 " ..	7,529	464	451	109	4,806	196	246	69	2,723	268	205	40
75 " 80 " ..	3,408	249	252	47	2,017	90	146	24	1,391	159	106	23
80 and upwards	2,181	200	198	36	1,214	74	115	20	967	126	83	16
Unspecified age under 21 ..	17	3	11	8	9	2	8	5	8	1	3	3
Unspecified age over 21 ..	381	7	12	176	233	4	4	142	148	3	8	34

Statistics showing the proportion of persons married in different years, and who signed the register with a mark, corroborate the census results as to advance in education. In the year 1881, 32 males and 58 females per 1,000 of either sex were found to be illiterate, as being not able to sign their names. These proportions fell to 19·21 males per 1,000 and 28·96 females per 1,000 of each sex in 1886, and again to 16·33 and 19·23 in 1890; in 1895 the proportions stood at 9·48 for males and the same for females, and in 1900 only 5·29 for males and 5·12 for females.

A table is next given to show particulars in respect of the various principal religious denominations, and of marriages by Registrars:—

PERSONS IN EVERY 1,000 MARRIED WHO SIGNED BY MARK.

Denomination.	1881.		1886.		1890.		1895.		1900.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Church of England ..	16·59	27·15	9 33	12·00	6·08	4·86	3·21	3·21	3·01	5·27
Presbyterians ..	10·25	29·61	9·79	7·62	8·59	15·27	5 00	1·00	2·59	3·23
Wesleyans and other Methodists	32·41	41·79	6·33	14·78	15·20	10·14	4·65	4·65	3·98	3·98
Roman Catholics	117·78	133·33	46·45	65·57	35·26	42·82	17·39	28·26	9·46	6·31
Other denominations ..	10·36	20·72	11·49	22·99	15·00	0·00	10·00	10·00	0·00	0·00
By Registrars ..	39·22	93·51	35·98	62·03	29 77	40·60	22·02	20·73	13·29	10·22
Total marriages	32·04	57·98	19·21	28·96	16·33	19·23	9·48	9·48	5 29	5·12

In all the preceding proportions and numbers the Chinese have been excluded.

Occupiers of houses were directed, in filling up census schedules, to see that Chinese should be set down as unable to read or write unless they could read and write English. Out of a total of 2,857 Chinese, 385 were returned in conformity with these instructions as capable of reading and writing English, 20 as able to read only, and 2,452 as not able to read or write; but of these 2,452, no less than 823 are stated to be able to read and write Chinese, and 17 to read only in that language.

ATTENDANCE AT SCHOOL (AS SHOWN FOR MARCH, 1901, BY CENSUS RESULTS.)

An inquiry was made as to the number of children attending schools of various kinds, besides those receiving tuition at home; also, as to the number of Sunday-school scholars and teachers. While information is always obtainable from the Educational Department as to children attending public schools, the number at private schools can only be got at by means of the census, or by special applications made for the purpose to the proprietors, which is done once a year. The census figures serve to check the returns received from private schools; while for Sunday-schools and tuition at home there is no other source of information.

The compiled tables give the attendance for March, 1901 :—

	Total.	Boys.	Girls.
At Government primary schools	132,911	68,360	64,551
At college, high, grammar, or private schools ..	19,837	8,994	10,843
Being taught at home	5,055	2,215	2,840

Comparison with former censuses shows increasing numbers at the schools, but latterly a decline in the home tuition. Possibly a gradually advancing density of population in the country districts accounts for the diminution in the children taught at home. The figures at last five successive censuses are :—

	At Government Primary Schools.	At College, High, Grammar or Private Schools.	Receiving Tuition at Home.
April, 1881	87,811	13,538	7,348
March, 1886	110,644	14,948	7,567
April, 1891	124,063	17,047	8,178
April, 1896	133,364	17,600	6,352
March, 1901	132,911	19,837	5,055

As to attendance at Sunday-schools, a comparison can only be made if the teachers be included with the scholars. Proceeding on these lines a large development is found since 1878 :—

Census Year.	Totals.	Males.	Females.
1878	62,273	30,707	31,566
1886	99,884	48,509	51,375
1896	116,045	54,063	61,982
1901	118,412	54,834	63,578

The excess of females over males would seem to grow greater, considered numerically, as well as in proportion to the numbers, with time.

Comparing the results as to teachers and pupils separately for 1901 and 1896, an increase of 188 is found in the Sunday-school teachers, and of 2,179 in the number of scholars, the increase being more marked in the female than in the male sex.

Census Year.	Teachers.	Pupils.		
		Males.	Females.	Total.
1901 ..	11,299	50,932	56,181	107,113
1896 ..	11,111	50,096	54,838	104,934
Increase ..	188	836	1,343	2,179

School Statistics to 31st December, 1901.

It has been found impossible to collect the full statistics relating to schooling for the year 1902 in time for this work, and the figures for the previous year are accordingly given.

The number of schools, teachers, and scholars, as in December, 1901, are shown in the following summary:—

Description of Schools.	Number of Schools.	Teachers.	Scholars.
EUROPEAN.			
Public (Government) schools (scholars other than Maoris and half-castes)	1,677	3,623*	128,663
Public (Government) schools (half-castes living among Europeans)			1,072
Colleges, grammar, and high schools (aided or endowed)	25	157	2,899
Private and denominational schools (excluding Maori scholars)	309	843	15,344
Industrial schools and orphanages	..	..	774
Native village schools, European children attending	..	..	338
Private Native boarding-schools, European children attending	..	..	14
School for Deaf-mutes	1	..	49
Jubilee Institute for Blind	1	1	16
Totals—European	2,013	4,624	149,169†

Description of Schools.	Number of Schools.	Teachers.	Scholars.
NATIVE.			
Native village schools supported by Government (excluding European children stated above)	91	157‡	2,935
Private Native boarding-schools (maintenance of scholars paid by Government)	4	11	78
Private Native boarding-schools (maintenance of scholars paid from endowments)			134
Private Native day-schools	3	6	96
Public (Government) schools, Maoris attending	..	..	1,382
Public (Government) schools, half-castes living as Maoris attending	..	..	234
Private and denominational schools for Europeans, Maoris attending	..	..	53
Totals—Native	98	174	4,912

* And 176 sewing-mistresses.

† In addition to the above, the census results showed that 5,055 children (2,215 boys, 2,840 girls) were being taught at home in March, 1901. Attendance at Sunday-schools is given on p. 243.

‡ And 15 sewing-mistresses.

Thus at the end of 1901 there were 2,109 schools of all classes at which members of the European and Maori races were being educated. This was an increase of 9 on the number in 1900. The public primary schools numbered 1,677 in 1901, against 1,674 in 1900. The number of aided or endowed colleges, grammar, and high schools was 25, one less than in the previous year. The number of private schools from which returns were received by the

Registrar-General was 309, an increase of 5. There were also ten industrial schools and orphanages, public and private, as well as a school for deaf-mutes subsidised by Government, and a school for the blind, which have not been included in the increase shown for the year.

The number of schools established for the education of the Native or Maori race was 98, two more than in 1900.

Education at the public schools is free (except that, at such as are also district high schools, fees are charged for the teaching of the higher branches) and purely secular. The attendance of all children between the ages of 7 and 13 is compulsory, except when special exemptions are granted, or a child is being otherwise sufficiently educated.

Public (Government) Schools.

Compared with 1900 there was in 1901 an increase of 627 in the number of pupils belonging to the public schools at the end of the year, and the average attendance shows an increase of 50 for the whole year and 856 for the fourth quarter.

SCHOOL ATTENDANCE AND YEARLY INCREASE FROM 1877 TO 1901.

Year	School Attendance.					Yearly Increase on			
	Number belonging at Beginning of Year.	Number belonging at End of Year.	Average Attendance*		Average Attendance expressed as Percentage of Roll-number.	Number belonging at Beginning of Year.	Number belonging at End of Year.	Average Attendance†	
			Fourth Quarter.	Whole Year.				Fourth Quarter.	Whole Year.
1877	...	55,688	...	...	...	...	...	...	...
1878	50,849	65,040	49,435	45,521	...	...	9,352	...	...
1879	59,707	75,566	57,301	53,067	73·8	8,858	10,526	7,866	7,546
1880	68,124	82,401	62,946	60,625	74·6	8,417	6,835	5,645	7,558
1881	74,359	83,560	63,009	61,822	74·2	6,235	1,159	63	1,197
1882	76,309	87,179	66,426	63,709	73·6	1,950	3,619	3,417	1,887
1883	79,416	92,476	70,077	67,373	74·0	3,107	5,297	3,651	3,664
1884	84,683	97,238	74,650	72,657	75·1	5,467	4,762	4,573	5,284
1885	90,670	102,407	80,183	78,327	76·6	5,787	5,169	5,533	5,670
1886	95,377	106,328	83,361	80,737	76·1	4,707	3,921	3,178	2,410
1887	99,206	110,919	87,386	85,637	77·0	3,829	4,591	4,025	4,900
1888	103,534	112,685	90,849	90,108	79·3	4,328	1,766	3,463	4,471
1889	104,919	115,456	94,306	93,374	80·3	1,385	2,771	3,459	3,266
1890	108,158	117,912	96,670	94,632	79·9	3,239	2,456	2,362	1,258
1891	110,665	119,523	96,264	97,058	80·3	2,507	1,611	[−406]	2,426
1892	112,279	122,620	100,917	99,070	80·6	1,614	3,097	4,653	2,012
1893	114,305	124,686	99,872	98,615	78·5	2,026	2,066	[−1,045]	[−455]
1894	116,819	127,300	107,032	104,996	81·8	2,514	2,614	6,279	4,875
1895	119,900	129,856	108,708	108,394	82·8	3,081	2,556	1,676	3,398
1896	122,425	131,087	110,274	110,517	83·3	2,525	1,181	1,566	2,123
1897	123,533	132,107	111,952	112,328	83·9	1,108	1,160	1,678	1,811
1898	123,892	131,621	109,561	111,636	83·4	359	[−576]	[−2,391]	[−692]
1899	123,207	131,315	109,050	110,316	82·6	[−685]	[−306]	[−511]	[−1,320]
1900	123,416	130,724	111,498	111,747	84·1	209	[−591]	2,448	1,431
1901	122,727	131,351	112,354	111,797	84·1	[−691]	627	856	50

*From 1877 to 1893 (inclusive) the "strict" average is given, and for subsequent years the "working" average.

† From 1877 to 1894 (inclusive) the increase on the "strict" average is given, and for subsequent years that on the "working" average.

In the report of the Minister of Education the figures are thus commented upon:—

The average of the weekly roll-numbers throughout the year 1901 was almost the same as for the year 1900, the figures being 132,869 for 1901 and 132,897 for 1900. The number on the rolls at the end of the year 1901 shows an increase of 627 over the number on the rolls in December, 1900, the actual totals being respectively 131,351, for the former year and 130,724 for the latter. An analysis of these figures shows that there was an increase of 687 in the children under nine years of age, a decrease of 88 in the number between the ages of nine and fourteen, and a slight increase (28) in the number of children over fourteen years of age. The increase in the number of young children enrolled raises the expectation of an increased roll-number for the present year, 1902; while the establishment of district high schools should have the effect of increasing the number of pupils over fourteen years of age, an effect which will probably be somewhat more marked as time goes on.

The standard of regularity of attendance reached in 1900 was maintained in 1901, the total average attendance being again 84·1 per cent. of the average weekly roll-number, against 82·6 in 1899. There seems to be good reason to hope that, partly through the operation of the School Attendance Act of 1901, partly from other causes, attendance at public schools may still further improve. It is, however, interesting to note in this connection that for the primary day-schools in England in 1900 the average attendance was 82·1 per cent. of the number on the registers, in Scotland 70 per cent., and in Ireland 64·1 per cent. As nearly as can be ascertained, the average attendance in the primary schools of the various Australian Colonies during the year 1900, expressed as a percentage of the net enrolment, was as follows: New South Wales, 72·3; Victoria, 67·54; Queensland, 72·7; South Australia, 69·0; Western Australia, 81·2; Tasmania, 74·9. The significance of these figures and the importance of maintaining a high standard of regularity of school attendance will be better appreciated if it is remembered that the leading authorities on juvenile depravity and crime are agreed that these social faults have for the most part their origin in truancy and in the acquirement of the nomadic habit; and accordingly the margin between a low rate and a high rate of school attendance, although affected in some degree by sparse settlement, represents to a large extent those individual children who will, if still neglected, go to swell our industrial schools and reformatories, and, at a later age, our prisons, refuges, and lunatic asylums.

The subjects of instruction at the primary schools are required by the Education Act to be the following: Reading, writing, arithmetic, English grammar and composition, geography, history, elementary science and drawing, object-lessons, vocal music, and (in the case of girls) sewing and needlework, and the principles of domestic economy. Provision must also be made for the instruction in military drill of all boys in these schools.

"The Manual and Technical Instruction Act, 1900," with its amendments of 1902, provides for manual and such subjects of technical instruction as are prescribed by regulations under this statute being included in the list of subjects named in the Education Act.

Technical Education.

The Manual and Technical Instruction Act of 1900, and the amending Act of 1902, provides for public instruction in such

manual and technical subjects as are set forth in the regulations thereunder. The same Acts provide also for the instruction in elementary handwork of pupils attending primary or secondary schools.

All classes recognised under the Act are eligible for grants in aid of necessary buildings, furniture, and apparatus, and for capitation. During 1902 capitation was paid on classes for drawing (various branches), painting, modelling, design, wood-carving, architecture, carpentry and joinery, plumbing, painters' and decorators' work, mechanical and electrical engineering, natural and experimental science (various branches), languages, mathematics, commercial subjects, cookery, laundry work, dressmaking, tailoring, wool-sorting, and singing.

Special classes maintained by Government grants for the training of public-school teachers in the subjects of manual and technical instruction prescribed for school classes have been established in several of the education districts of the colony.

The subjects taken up in school classes included cookery, woodwork, cottage gardening, swimming and life-saving, first aid and ambulance, dressmaking, and laundry work.

There were (1902) fifteen Technical or Art Schools, at which 360 recognised classes, attended by about 4,500 students, were conducted. Several new schools are in course of erection, while others are contemplated.

In connection with the Canterbury College there is an endowed School of Engineering and Technical Science, the students in which work for the university degree of B.Sc. in engineering. One hundred and ninety-two students attended in 1902.

The Canterbury Agricultural College has an endowment of over 60,000 acres of land, and possesses extensive buildings, and an experimental farm of a very complete character. The students work for the university degree of B.Sc. in agriculture. There were thirty students in 1902.

There are several Schools of Mines located in districts in which mining is actively carried on, and the Otago University maintains a professorial chair of mining and metallurgy, to which the Government makes an annual grant of £500. The number of students in mining in 1902 was over three hundred, sixty of whom were at the Otago University.

With the view of encouraging attendance at recognised technical schools and classes, arrangements have been made with the Railway Department by which teachers of classes registered with the Minister of Education may give certificates to their pupils which will enable them to obtain railway tickets at special rates.

The following table shows the results of examinations conducted in the colony on behalf of the Science and Art Department, London, and of the City and Guilds of London Institute:—

LONDON TECHNICAL AND ART EXAMINATIONS, 1901.

["C" represents candidates; "P" passes.]

Subjects of Examination.	Auckland.		Wanganui.		Wellington.		Pahiatua.		Napier.		Christchurch.		Timaru.		Dunedin.	
SCIENCE AND ART DEPARTMENT.	C	P	C	P	C	P	C	P	C	P	C	P	C	P	C	P
Art.																
Drawing with chalk on the blackboard	15	13	...	...	...	...	...	...	5	5	1	..	...	...	...	...
Geometrical drawing (art)	5	2	9	2	3	3	...	...	...	..	2	2	...	...	18	11
Perspective	5	3	1	1	...	...	...	...	...	...	3	1	...	...	10	1
Model drawing	22	20	5	4	6	6	1	1	11	8	7	6	2	2	27	22
Freehand drawing in outline	21	13	14	5	6	4	6	1	7	4	7	5	4	3	50	20
Drawing in light and shade	14	10	3	2	6	4	...	...	5	5	4	3	2	1	13	10
Principles of ornament	...	...	...	...	...	...	...	...	...	...	1	.	...	...	2	1
Design	...	...	1	1	7	2	..	...	...	...	1	1	...	...	..	...
Painting from still life	5	5	2	2	1	1	...	...	..	...	...	...	...	...	4	3
„ ornament	..	...	1	..	...	.	...	...	...	...	1	1	...	...	2	2
Drawing from the antique	6	6	1	...	2	2	..	...	...	...	...	..	...	...	5	3
„ the antique from memory ...	...	...	1	1	...	...	..	...	...	...	..	...	...	...	1	1
„ from life	..	...	3	..	8	2	..	...	...	...	...	..	...	...	2	1
Students' works	19	9	15	6	22	6	...	...	13	...	4	2	...	...	3	1
Science.																
Practical plane and solid geometry ...	...	...	7	5	2	1	...	...	...	...	...	..	2	...	4	3
Machine construction and drawing ...	16	13	...	..	10	10	...	...	...	...	...	...	..	...	20	14
Building construction	5	4	1	...	11	9	...	...	...	...	2	2	...	...	7	6
Mathematics	1	1	2	1	...	..	...	...	..	...	..	...	...	...	...	...
Practical mathematics	...	...	...	...	1	1	...	...	..	...	...	...	...	..	...	...
Applied mechanics	2	1	...	...	...	..	...	...	...	...	...	...	...	...	3	3
Steam	9	7	...	...	5	3	...	...	...	...	...	...	...	...	1	1
Magnetism and electricity	6	2	...	...	2	2	...	...	...	...	1	1	...	...	...	...
Principles of agriculture	..	..	2	2	...	...	...	...	...	...	..	...	...	...	...	...
CITY AND GUILDS OF LONDON INSTITUTE.																
Woodwork, final	...	...	...	...	...	...	...	...	...	...	6	5	...	...	...	...
Carpentry and joinery (ordinary) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Mechanical engineering	3	2	...	...	4	1	...	...	...	...	...	...	...	...	8	7
Plumbing (preliminary)	...	...	...	...	2	2	..	...	...	...	...	...	...	...	...	...
„ (ordinary)	..	..	...	...	1	1	..	...	...	...	...	...	...	...	...	...
„ (honours)	...	...	...	...	1	1	..	...	...	...	...	...	...	...	5	4
Painters' and decorators' work ...	3	...	...	...	...	...	..	...	...	...	3	3	...	...	...	...
Gas manufacture (honours)	...	...	1	1	...	...	...	...	...	...	..	...	...	...	...	...
Electric light and power (preliminary)	...	...	...	...	10	5	...	...	...	...	...	...	...	...	...	...
Electric light and power	...	...	..	...	6	3	...	...	...	...	..	...	...	...	...	...
Telegraphy (honours)	...	...	..	.	..	...	..	...	...	...	1	1	...	...	...	...
Lithography (preliminary)	...	..	...	...	1	1	...	...	..	...	...	...	...	...	...	...
„ (ordinary)	...	...	...		1	1	..	...	...	...	...	...	...	...	..	...
Totals	157	111	69	33	118	71	7	2	41	22	44	33	10	6	186	115

Total of papers, 632; total of passes, 393.

In the twenty-fifth annual report, the Minister of Education remarks on manual training and technical instruction:—

During the year steady progress has been made in the formation of adult classes for technical instruction, and there has been a large increase—more than fivefold—in the classes for manual instruction in public schools, principally in the direction of introducing into the work of the preparatory classes and into the lower standard classes exercises based upon kindergarten methods. This feature is sound as far as it goes, as it seems to show that the spirit of the new movement is being rightly understood, for the change indicated by the

introduction of hand-work into the school is not one affecting the mere details or machinery of school work, but is more fundamental in its character. Changes that affect only the externals of the school system, or only increase the number of disconnected subjects in the school syllabus, are sure to turn out in the end to be mere temporary devices. It has been the fashion to speak of that portion of a man's education that he receives at school as a preparation for life; in truth, a man's education goes on throughout his whole life, and the time spent at school is not merely a preparation for life, it is part of life itself. If the manual dexterity and the regular and easy co-ordination of hand and eye and brain that lead to the development of skill in the workman or the engineer, the artist or the surgeon, be not developed in youth, then there is a gap between the school-life and the after-life that is unnatural and prejudicial to the success of the adult; for there are few occupations in which some degree of manual skill is not at one time or another useful, and none in which men or women can afford to be without that all-round training of the mind that can be obtained only by combining the exercise of the muscular activities with that of the observation, reason, and memory. The instincts of the child herein guide him aright; he is constantly examining objects and seeking for some fresh outlet for his muscular activities. (As every instinct corresponds to some reality, no instinct should be overlooked; but every instinct should either be trained or be guided aright in the years of childhood.) These instincts are not such as mark the brute, but belong to the higher human intelligence, and they must therefore be taken seriously as indications of undeveloped powers, which need to be directed and disciplined, not suppressed, until they appear as scientific habit and manual skill in the youth and the adult. The new method of treatment accordingly extends not to one or two subjects of the curriculum, but, more or less, to nearly all. Besides the advantage derived from the fact that manual training brings into the school course a natural co-ordination by co-ordinating all the subjects of that course with life, its introduction into the schools gives opportunity to discover aptitudes that would otherwise perhaps be unsuspected, and to develop the pupils in such a way that they make intelligent use of this opportunity. It is evident that only a beginning can be made in the elementary school; hence the necessity for carrying on the work more completely in continuation and technical classes, and in the secondary schools and university colleges.

Professor John Dewey, one of the foremost men in matters of education in the United States at the present time, lays great stress on the points just referred to, and pertinently asks, "Now that the great value of manual training has come to be recognised in secondary" (and we may add, primary) "schools, why should not all the pupils have the benefit of it?" Again, he says, "Domestic science should be classed with science studies, and as such be provided with a labora-

tory." And, if domestic science, why not, it may be added, agricultural science and the practical and scientific work that forms the basis of the other industries of life? In the elementary school all that can be done is to keep this aim in view, and to shape the course so that a firm foundation may be laid. A sound though rudimentary course of nature-study, the continuous training of hand and eye, and the development, by easy measurements, experiments, and observations performed by each child for himself or herself, of a habit of knowing things themselves, are the main characteristics that should mark this side of a pupil's work in the public school.

There are now (July, 1902) 360 classes established in various parts of the colony under the Manual and Technical Instruction Act, exclusive of school classes. The number last year was 293. Of the total of 360, 35 are continuation classes; the remainder are classes for manual or technical instruction. The number of school classes in operation last year was 132; the number in operation now (July, 1902) is 700. Of these, 18 are established in connection with secondary schools; the rest are in public elementary schools. Of the latter, 231 are connected with town schools, and 451 with schools in country districts. It is hoped that with the issue of the new standard syllabus shortly to be gazetted there will be a marked increase in the number of "hand-work" classes established in connection with the upper standards.

Last year (1901) special grants, amounting to £1,875 in all, were given to the Boards of Education to enable them to provide training for their teachers in those subjects prescribed by the regulations under the head of "Hand-work" in school classes. The grant, which is intended to cover the cost of the training in manual and technical work of pupil-teachers and normal-school students as well as of teachers already on the staffs of the schools, is to be renewed this year. From the reports that have been received, the several amounts seem to have been used in a careful and judicious way, and no doubt results will show that the money has been wisely expended.

New regulations were issued at the beginning of the present year, removing many of the restrictions that seemed necessary at first, and simplifying the mode in which grants are obtained. Further experience shows that still more simplification is possible, and the egulations will be further amended in this direction.

Many local bodies having shown a disposition to assist in promoting technical education, but being doubtful as to their right to representation on the bodies of managers of associated classes, a short Bill will be introduced to make it clear that such local bodies have the same powers as the associations already specifically named in the Manual and Technical Instruction Act of 1900. The result will probably be the formation of strong "associated classes" in all the chief centres, under the Boards of Education as controlling authorities, but having their own managers, representing all the

bodies combining in the work. Such a course will probably tend both to efficiency and economy of money and of effort.

"The Manual and Technical Education Act, 1902," gives effect to the powers indicated in the foregoing paragraph.

In the following table a statement is given of the expenditure upon manual and technical instruction during the year:—

STATEMENT OF EXPENDITURE FOR YEAR ENDING 31ST DECEMBER, 1901.

	£	s.	d.	£	s.	d.
Capitation				2,805	12	11
Subsidy of pound for pound on contributions				729	13	5
Grants:—						
Buildings and apparatus	3,440	8	10			
Class material	156	3	5			
				3,596	12	3
Training of Teachers:—						
Auckland Education Board	250	0	0			
Taranaki "	100	0	0			
Wanganui "	150	0	0			
Wellington "	200	0	0			
Hawke's Bay "	150	0	0			
Marlborough "	75	0	0			
Nelson "	125	0	0			
Grey "	75	0	0			
Westland "	75	0	0			
North Canterbury "	200	0	0			
South " "	125	0	0			
Otago "	200	0	0			
Southland "	150	0	0			
				1,875	0	0
Railway fares of teachers attending training-classes				256	0	9
Railway fares of instructors of training-classes				47	3	11
" students attending registered classes of individuals				175	8	8
Expenses in connection with Examinations:—						
Science and Art Board of Education, South Kensington	63	10	0			
City and Guilds of London Institute	13	12	10			
				77	2	10
Art posters				25	0	0
Inspectors:—						
Salaries	659	10	10			
Travelling-expenses	203	19	3			
				863	10	1
Advertising and sundries				56	10	3
Total				£10,507	15	1

School or Instructor.	Subjects of Instruction (grouped), and Average Attendance.														Payments.								
	Freehand (from Flat and Round) and Shading.	Drawing from Nature, Painting, and Modelling.	Mechanical Drawing and Engineering, and Machine Construction.	Geometry and Perspective.	Design and Ornament.	Architecture, and Building Construction.	Mathematics.	Natural and Experimental Science (Botany, Chemistry, and Physics).	Woodwork.	Plumbing (Theory and Practice).	Domestic Instruction.	English, and Commercial Subjects, and Latin and French.	Singing and Elocution.	Kindergarten Work.	Capitation.			Grants for Buildings, Apparatus, and Material.			Pound-for-Pound Subsidy on Voluntary Contributions.		
															£	s.	d.	£	s.	d.	£	s.	d.
Technical Classes Association, Auckland	14	..	2	4	8	14	..	..	23	9	..	..	..	..	91	3	6	..			..		
"Elam" School of Art, Auckland ..	25	..	..	58	..	..	..	..	..	..	..	..	..	..	172	5	2	..			150	0	0
Payton, Mr. E. W., Auckland ..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	2	7	1	..			..		
Robinson, Mr. W. I., Auckland ..	..	..	52	12	..	..	..	..	..	..	..	..	..	..	11	10	1	..			..		
Education Board, Auckland—																							
Devonport Public School	..	..	..	..	..	..	..	..	11	..	..	..	..	..	7	1	0	..			..		
Education Board, Wanganui—																							
Technical School, Wanganui ..	19	28	11	21	2	10	..	..	22	..	..	..	..	..	121	14	6	..			10	10	0
Technical classes, Palmerston North	17	19	..	7	..	..	..	..	..	..	..	..	..	..	91	14	4	..			..		
" " Hawera ..	8	15	..	4	..	..	..	..	4	..	..	..	..	..	34	1	4	..			..		
" " Eltham ..	..	..	..	..	..	..	..	..	9	..	..	..	..	..	9	13	1	..			..		
Education Board, Wellington—																							
Technical School, Wellington ..	34	266	23	107	29	32	35	..	63	141	10	93	..	..	830	19	5	383	11	8	152	0	0
Technical classes, Pahiatua ..	17	..	..	..	..	..	..	..	..	..	..	..	..	..	6	2	6	..			..		
" " Carterton ..	..	..	..	..	..	16	..	..	..	..	..	..	..	..	4	4	6	..			..		
Technical Classes Associati'n, Masterton	36	..	18	..	..	..	..	8	30	..	..	14	..	..	47	11	3	..			149	15	2
Caverhill, Miss L. L., Petone ..	17	17	..	..	..	..	..	..	..	..	..	..	..	..	8	10	8	..			..		
Anderson, Mr. R. N., Napier ..	..	42	..	..	..	..	..	..	..	..	..	..	..	..	6	19	6	..			..		
Education Board, Napier—																							
Technical School, Napier	17	18	..	..	..	..	..	..	..	..	..	..	..	..	34	19	9	..			..		
Napier Public School	104	..	..	..	104	..	..	..	..	..	..	..	..	..	48	11	7	..			..		
Spit School	..	..	..	..	45	..	..	..	..	..	..	..	..	..	11	3	10	..			..		
Port Ahuriri Public School ..	..	..	..	..	58	..	..	..	..	..	..	..	..	..	20	11	0	..			..		

Beecroft, Miss M., Hastings	6	..	..	..	..	..	..	..	..	..	..	..	..	..	1 2 6	..	..
Education Board, Grey—																							
Greymouth District High School ..	..	..	..	..	..	..	..	..	17	..	..	..	..	..	6 15 9	..	..
Education Board, Westland—																							
Kumara Public School	..	..	..	..	..	..	..	..	19	..	..	..	..	..	21 12 8	..	..
Canterbury College—																							
School of Art, Christchurch ..	162	95	..	65	28	37	..	..	..	..	..	..	..	..	288 10 3	658 0 0	..
School of Engineering and Technical Science, Christchurch	61	..	58	63	..	..	..	..	..	..	..	..	..	..	108 10 3	..	..
School of Domestic Instruction, Christchurch	..	..	..	..	..	..	..	..	..	..	90	..	..	..	134 11 0	66 7 6	..
Education Board, North Canterbury—																							
School of Domestc Instruction ..	..	..	..	..	..	..	..	..	..	..	376	..	..	..	61 12 6	..	..
Christchurch School Classes ..	56	..	..	..	..	..	..	..	..	..	..	..	..	..	13 6 6	..	..
Amberley Public School	..	..	..	..	..	..	..	..	..	..	25	..	..	..	13 2 6	..	..
Fendalton Public School	..	..	..	..	..	..	..	..	..	..	17	..	..	..	3 3 9	..	..
Addington Public School	..	..	..	..	..	..	..	..	..	..	33	..	..	..	6 3 9	..	..
Technical Classes, Leeston ..	17	..	..	..	..	..	..	..	..	..	..	..	..	..	9 1 6	..	..
" Lyttelton ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100 0 0	..
Technical Classes Associati'n, Ashburton	..	..	..	6	..	..	2	2	..	..	..	25	..	..	3 18 2	..	..
" Timaru ..	16	13	18	..	..	..	8	..	..	..	81	152	..	..	63 1 5	..	79 17 6
High School Board, Timaru—																							
Classes at Timaru Girls' High School	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 18 0	..
Education Board, South Canterbury—																							
Timaru Main Public School ..	..	..	..	..	..	..	..	..	..	..	..	..	..	153	2 16 6	..	..
Timaru South Public School ..	..	..	..	..	..	..	..	..	..	..	..	..	..	70	1 4 8	3 14 0	..
Waimataitai Public School ..	..	..	..	..	..	..	..	..	..	..	..	..	..	91	1 9 9	..	..
Temuka District High School ..	..	..	..	..	..	..	..	..	..	..	..	..	..	79	1 16 10	..	..
Technical Classes Association, Dunedin	..	..	39	..	..	10	59	39	36	16	74	313	17	..	91 9 10	2,232 18 10	179 18 3
Education Board, Otago—																							
School of Art, Dunedin	110	63	24	80	20	..	..	..	..	..	..	..	..	..	354 16 6	..	..
Classes at Tokomairiro District High School	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29 3 8	..
Kidston-Hunter, Mr. A., Dunedin ..	..	..	..	..	..	..	..	16	..	..	..	..	..	..	5 3 9	..	..
Education Board, Southland—																							
Technical Classes, Associated, Invercargill	9	5	26	..	..	11	6	8	17	..	51	56	..	..	42 7 0	114 18 7	7 12 6
Technical Classes, Mataura ..	..	..	8	..	..	..	..	..	..	..	11	32	..	..	8 11 6	..	..
Totals	754	581	279	427	294	130	110	73	251	166	768	685	17	393	2805 12 11	3596 12 3	729 13 5

New Zealand University.

The introduction of university education into New Zealand was effected by the Superintendent and Provincial Council of Otago, who in 1869 passed an Ordinance under which the University of Otago was established. Following closely on the founding of this institution was the establishment of the University of New Zealand under an Act of the General Assembly, "The New Zealand University Act, 1870." This University subsequently received a Royal charter, whereby the degrees which it confers are declared entitled to "rank, precedence, and consideration" throughout the British Empire "as fully as if the said degrees had been conferred by any university of the United Kingdom." It was apparently contemplated by Parliament (*vide* section 19 of the Act last quoted) that the New Zealand University and the Otago University should be amalgamated; but the negotiations for this purpose having failed the two institutions remained for some time distinct bodies. In the year 1874, however, the University of Otago surrendered or put in abeyance its power of conferring degrees, and became affiliated to the University of New Zealand, and at the same time it was stipulated that the University of New Zealand should not directly exercise functions of teaching.

In 1902 an amendment Act was passed reconstituting the Senate, which now consists of twenty-four members or Fellows, five to be elected by each of the four University College districts, that is to say—two by each governing body, two by each District Court of Convocation, and one by each Professorial Board. The remaining four members are nominated by the Governor in Council.

In the year 1873 the Superintendent and Provincial Council of Canterbury passed an Ordinance for founding "The Canterbury College," and the college was accordingly established with the same standard of university education as that of the University of Otago, but without the power of conferring degrees.

In December, 1878, a Royal Commission on University and Secondary Education was appointed by the Governor, which met in July, 1879, and reported that two colleges, with an income of £4,000 each, ought to be established in Auckland and Wellington, and that suitable buildings, at a cost of £12,500 each, should be erected in those cities. In the following year the Royal Commission repeated these recommendations.

"The Auckland University College Act, 1882," which became law on the 13th September in that year, definitely established the college, and endowed it with a statutory grant of £4,000 per annum. By "The Auckland University College Reserves Act, 1885," three blocks of land, containing about 10,000 acres each, and a block containing about 354 acres, which had been devoted to the purpose of promoting higher education in the Province of Auckland, became vested in the Council of University College.

The Auckland University College was affiliated to the University of New Zealand by the Senate of the university on the 6th March, 1883, and on the 21st May in the same year the college was opened by the Governor.

Nothing was done for Wellington until the year 1894, when an Act was passed entitled "The Middle District of New Zealand University College Act, 1894," which said "There shall be established in the City of Wellington a college to be connected with the University of New Zealand," and provision was made for a governing body to be called the Council, but no provision was made for any pecuniary grant nor any endowment, and, though certain members of the Council were appointed, nothing could be done for want of funds.

Not until 1897 were the needs of Wellington actually attended to. In the session of Parliament that year the Right Hon. Mr. Seddon, P.C., Premier of the colony, introduced the Victoria College Act: an Act, as stated in the preamble, "to promote higher education by the establishment of a College at Wellington in commemoration of the sixtieth year of the reign of Her Majesty Queen Victoria," the college being intended to embrace in its work the Provincial Districts of Wellington, Taranaki, Hawke's Bay, Nelson, Marlborough, and Westland. The Act was passed on the 22nd December, 1897, and the Council was formed as provided in the Act, and the work of organization was begun. The Act provides for the payment out of the Consolidated Fund of a grant of £4,000 a year, and also requires the Council to give six scholarships each year, called "Queen's Scholarships," to persons of either sex under the age of fourteen years, upon the results of an examination under such conditions as the Council may provide. The Act further sets apart a parcel of land 4,000 acres in extent in the Nukumaru Survey District (Wellington Provincial District) as an endowment for the college.

The Council of the college has established six chairs: classics, English, mathematics and mathematical physics, chemistry, physics, and biology; and lectureships in modern languages, mental science, jurisprudence and constitutional history, general history, and political economy and law. It is intended as funds allow to add other subjects.

The New Zealand University is not a teaching body, as above explained, undergraduates hitherto for the most part keeping their terms at one or other of the affiliated institutions: the Auckland University College, the Victoria College, the Canterbury College, and the University of Otago, each of which has now a staff of professors and lecturers. On the 1st June, 1902, the number of graduates who had obtained direct degrees was 819.

The number of undergraduates on the roll of the University at that date was 2,637 (exclusive of such as had not performed any academical act for a period of ten years), but only 1,468 were keeping terms (not including undergraduates who had not, in the last two years, entered at a college or come up for any college or university examination), of whom 955 were males

and 513 females. One hundred and four of the males and twenty-three of the females were medical students. The numbers of students attending lectures at the affiliated institutions during the year 1901–1902 were as follow: At the Auckland University College, 111 matriculated and 71 non-matriculated; at Canterbury College, 148 matriculated and 72 non-matriculated; at the Otago University, 210 matriculated and 27 non-matriculated. The Victoria College, before-mentioned, affords further facilities for university students, and in June, 1902, had a total of 144 students on the roll—112 matriculated and 32 non-matriculated.

Private and Denominational Schools.

There were 309 private schools in the colony at the end of 1901, an increase of 5 on the number in 1900: 30 were for boys, 74 for girls, and 205 for children of both sexes. The number of pupils attending them was 15,344—namely, 6,244 boys and 9,100 girls, not counting 53 Maoris, 23 boys and 30 girls. The number of European pupils at these schools was less than in 1900 by 211. Of the private schools, 129 were Roman Catholic, with an attendance of 10,448 pupils.

The following gives, for the past ten years, the number of private schools and of Europeans attending them, the number of Roman Catholic schools and pupils being also shown separately:—

Year.	Number of Private Schools.	Pupils.			Included in Previous Numbers.	
		Boys.	Girls.	Totals.	Roman Catholic Schools.	Pupils at Roman Catholic Schools.
1892	274	6,321	8,135	14,456	105	10,111
1893	299	6,431	8,491	14,922	111	10,263
1894	302	6,117	8,510	14,627	117	9,953
1895	298	6,187	8,472	14,659	114	10,458
1896	283	5,845	8,102	13,947	115	9,590
1897	278	5,974	8,473	14,447	120	9,642
1898	294	6,043	8,739	14,782	124	10,175
1899	307	6,219	9,076	15,295	133	10,526
1900	304	6,152	9,403	15,555	132	10,687
1901	309	6,244	9,100	15,344	129	10,448

The total number of children of European descent (including such half-castes as live among Europeans) known to be receiving education at school at the end of 1901 was 149,169; of these, 141,339 were from 5 to 15 years of age. The census showed also 5,055 children receiving tuition at home in 1901, against 6,352 in 1896. No doubt increased school accommodation in country places does away with the need for tutors and governesses to a certain extent.

The distribution of the private schools in the various provincial districts of the colony is shown in the next page:—

PRIVATE AND DENOMINATIONAL SCHOOLS, 1901.—SUMMARY BY PROVINCIAL DISTRICTS.

Provincial Districts.	Number of Schools.				Number of Teachers.			Number of Scholars.			Daily Average Attendance.		
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	4	19	59	82	31	168	199	1,270	2,009	3,279	1,081	1,780	2,861
Taranaki	...	2	11	13	...	28	28	195	333	528	164	289	453
Hawke's Bay	4	4	9	17	13	41	54	491	575	1,066	432	496	928
Wellington...	6	15	36	57	42	148	190	1,318	1,913	3,231	1,191	1,730	2,921
Marlborough	1	...	5	6	...	12	12	155	145	300	125	123	248
Nelson	3	5	6	14	11	29	40	387	469	856	361	430	791
Westland	1	2	9	12	3	25	28	264	325	589	219	282	501
Canterbury	7	18	37	62	15	144	159	1,154	1,657	2,811	992	1,482	2,474
Otago	4	9	33	46	14	119	133	1,010	1,674	2,684	820	1,408	2,228
Totals	30	74	205	309	129	714	843	6,244	9,100	15,344*	5,385	8,020	13,405

* Exclusive of 53 Maoris (23 boys, 30 girls).

NOTE.—Denominational schools, such as Roman Catholic and Anglican, are included in the above as private schools. Particulars for the Roman Catholic schools in December, 1901, are as under:—

SUMMARY OF ROMAN CATHOLIC SCHOOLS.

Provincial Districts.	Number of Schools.				Number of Teachers.			Number of Scholars.			Daily Average Attendance.		
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	2	11	20	33	6	81	87	757	1,258	2,015	616	1,093	1,709
Taranaki	...	1	3	4	...	16	16	149	234	383	127	206	333
Hawke's Bay	2	2	3	7	7	25	32	374	439	813	331	371	702
Wellington	3	5	10	18	20	66	86	841	1,119	1,960	766	1,024	1,790
Marlborough	1	...	2	3	...	7	7	134	113	247	106	95	201
Nelson	2	4	2	8	2	19	21	210	340	550	189	311	500
Westland	1	2	7	10	3	22	25	247	300	547	206	262	468
Canterbury	3	6	13	22	11	63	74	830	1,041	1,871	699	941	1,640
Otago	4	3	17	24	13	62	75	873	1,189	2,062	705	986	1,691
Totals	18	34	77	129	62	361	423	4,415	6,033	10,448	3,745	5,289	9,034

Schools for Natives.

The number of Native village schools at the end of 1901 either supported or subsidised by the Government was 91, or two more than at the end of the previous year. In addition, there were four boarding-schools for Native children, the cost of whose maintenance was partly paid either by the Government or from endowments, and three private Native day-schools. The number of Maori children attending schools during the fourth quarter of 1901 was 4,912—namely, 2,791 males and 2,121 females. These included 303 half-castes at the Native village schools who were living as members of Maori tribes, and 234 at public European schools.

The numbers at the several schools in 1900 and 1901 were as under:—

Schools.	Maori Children attending Schools.					
	Boys.		Girls.		Total of both Sexes.	
	1901.	1900.	1901.	1900.	1901.	1900.
At public European schools ..	936	839	680	597	1,616	1,436
At Native village schools ..	1,641	1,576	1,294	1,186	2,935	2,762
At subsidised or endowed boarding-schools	122	111	90	91	212	202
At private European or Native schools	92	84	57	55	149	139
Totals	2,791	2,610	2,121	1,929	4,912	4,539

There was thus, in 1901, an increase of 181 in the number of Maori boys, and 192 in the number of Maori girls, attending school.

Sixty-nine out of the ninety-one Native village schools in operation on 31st December, 1901, were under the charge of masters and seventeen under mistresses, and one under the joint control of a master and mistress; there were besides sixty-nine assistants, and fifteen sewing-mistresses. The salaries paid to the head-teachers range from £97 to £285, and those for assistants and sewing-mistresses from a nominal sum to £50.

The expenditure on Native schools for 1901 was as follows: Teachers' salaries and allowances, £14,273 1s.; books and school requisites, £440 18s.; repairs and small works, £519 15s. 6d.; inspection, £868 11s. 4d.; boarding-schools and scholarships, £1,990 6s. 11d.; buildings, fencing, furniture, &c., £4,312 3s. 8d.; technical instruction classes, £720 2s. 1d.; sundries, £285 11s. 6d.; total, £23,410 10s.

Income and Expenditure of Education Boards.

The total income of the various Education Boards for the year 1901 was £521,536. The grants by Government amounted to £473,379, an increase of £26,004 on the grants in 1900. These

grants consist of (*a*) a statutory allowance of £3 15s. per child in daily average attendance, (*b*) a further capitation allowance of 1s. 6d. for scholarships, (*c*) a varying sum for school buildings, and (*d*) grants for technical education. The income from reserves amounted to £40,969, and that from local receipts, &c., to £7,188.

The total expenditure in 1901 amounted to £526,179, of which the sum of £427,660 was laid out on the maintenance of the schools.

The receipts and expenditure of the Education Boards, numbering thirteen altogether, are tabulated below, with further particulars:—

RECEIPTS AND EXPENDITURE OF EDUCATION BOARDS.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
To Balance, 1st January, 1901	11,565	8	8	By Boards' administration ...	15,127	5	1
Government grants—				Inspection and examination	14,690	9	11
Rents from reserves £40,969 0 2				Teachers' salaries and allowances	382,061	4	9
Balance of capitation 413,381 2 11				Incidental expenses of schools	33,045	12	8
Total for maintenance ...	454,350	3	1	Scholarships	8,549	11	3
Buildings	55,049	7	3	Training of teachers ...	4,003	4	9
Technical	4,948	0	7	Buildings, sites, plans, &c.	60,102	13	0
Local receipts—				Manual and technical instruction	7,610	13	10
Fees, donations, &c. ...	4,989	19	3	Interest and exchanges ...	241	11	9
Rents, &c. ...	1,552	17	11	Refunds and sundries ...	746	4	2
Refunds, deposits, &c. ...	645	14	8	Balance 31st December, 1901	6,923	0	3
	£533,101	11	5		£533,101	11	5

Particulars of the scholarships and the expenditure of the Boards thereon in 1901 are given in detail. The only institutions for the training of teachers are in North Canterbury and Otago. These two institutions have received grants-in-aid of £500 each.

SCHOLARSHIPS.

Education Districts.	Number held in Dec., 1901.	Boys.	Girls.	Period of Tenure.	Boards' Expenditure on Scholarships in 1901.	Annual Value, &c.
				Years.	£ s. d.	
Auckland ...	79	49	30	3	1,716 0 6	3 at £30, 22 at £25, 22 at £20, 32 at £15.
Taranaki ...	13	8	5	2	295 15 9	2 at £35, 1 at £17, 1 at £16, 2 at £14, 6 at £10, 1 at £7 6s.
Wanganui ...	17	8	9	Varies	622 13 3	11 at £40, 1 at £32, 5 at £15.
Wellington ...	44	25	19	2	958 1 5	13 at £35, 31 at £15.
Hawke's Bay ...	23	9	14	2	471 0 3	9 at £30 4s., 1 at £16 4s., 2 at £13 4s., 1 at £12 4s., 10 at £10 4s.
Marlborough ...	10	2	8	2	139 0 0	2 at £40., 1 at £35, 7 at £10.
Nelson	8	4	4	Varies	371 9 0	6 at £50 10s., 2 at £25.
Grey	12	6	6	3	77 2 0	4 at £35, 8 at £10.
Westland ...	7	3	4	2	100 10 0	1 at £23, 2 at £17 10s., 4 at £8.
North Canterbury	38	20	18	2	1,317 0 4	21 at £40, 17 at £20.
South Canterbury	34	18	16	2	326 15 11	Varies from £22 10s. to £2 10s.
Otago	52	35	17	Varies	1,332 0 9	13 at £40, 3 at £35, 2 at £24, 1 at £22, 15 at £20, 2 at £17, 16 at £15.
Southland ...	21	14	7	Varies	604 1 3	13 at £35, 3 at £20, 5 at £15
Totals, 1901 ...	358	201	157	...	8,331 10 5	
Totals, 1900 ...	349	197	152	...	8,142 10 9	

Income and Expenditure of Secondary or Superior Schools.

A summary of the accounts of income and expenditure for the year 1901, as furnished by the governing bodies of the secondary or superior schools in the colony, shows the total receipts to have been £71,040. To this total, rents and sales of reserves contributed £28,509; interest on investments, and other receipts from endowments, £5,698; fees, £32,454; and miscellaneous, £4,379.

The total expenditure amounted to £84,725, of which sum office management and expenses absorbed £2,606; teachers' salaries, £34,924; scholarships and prizes, £2,511; buildings, furniture, insurance, rates, and rent, &c., £9,412; and other expenditure, £35,272. Included in the last item is a sum of £19,386, capital invested, which cannot be classed as ordinary expenditure.

A summary of the accounts for the year 1901, exhibiting further details, is given below:—

SECONDARY OR SUPERIOR SCHOOLS, 1901.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
To Credit balances on 1st January, 1901	24,724	17	10	By Liabilities on 1st January, 1901	2,467	4	10
Endowment reserves sold	5,040	10	7	Expenses of management	2,605	12	3
Mortgage moneys repaid	2,670	0	0	School salaries	34,923	19	3
Rents of reserves ...	23,468	8	11	Boarding-school accounts	5,168	8	0
Interest on investments	1,931	3	8	Examination expenses ...	354	0	1
Reserves Commissioners' payments	3,766	15	1	Scholarships and prizes ...	2,511	3	10
School fees (tuition) ...	26,435	7	0	Printing, stationery, fuel, light, &c.	3,076	9	6
Boarding-school fees ...	6,019	8	0	Buildings, furniture, insurance, rent, and rates	9,412	1	1
Books, &c., sold, and refunds	263	4	0	Expenditure on endowments	3,751	13	5
Sundries not classified ...	1,245	12	8	Capital invested	19,386	10	0
Debit balances, 31st December, 1901	1,357	1	10	Interest	1,243	3	8
				Sundries	2,291	13	3
				Credit balances, 31st December, 1901	9,930	10	5
	£97,122	9	7		£97,122	9	7

Industrial Schools.

In December, 1901, the total number on the books of all the industrial schools was 1,765, or 62 more than at the close of the year 1900. On the books of the Government industrial schools there were 1,227, an increase of 64 over the corresponding number for 1900; on the books of the private industrial schools there were 538, or two less than at the end of the previous year. The number in residence at Government schools was 293, and at private industrial schools 348, so that 641 was the total number of "inmates" actually in residence. The number boarded out was 419, one being from a private school and the rest from Government schools. There were 17 girls maintained in various corrective institutions, 13 boys and girls in orphan homes, 1 boy at the Blind Institute, Auckland, and 1 at the School for Deaf-mutes, Sumner. The total number of inmates dependent on the schools for maintenance was therefore

1,092, or 56 more more than the number at the end of 1900. The remaining 673, although still subject to control and supervision, were not dependent on the schools for maintenance. They may be classified as follows: Licensed to reside with friends, 155; at service, 448; in hospital, 4; in lunatic asylum, 5, in the Costley Training Institution, Auckland, on probation, 2; in other institutions without payment, 13; in gaol, 6; absent without leave, 40: namely, 29 from service and 11 from the schools.

There were six Government industrial schools in existence in 1901, and the numbers of inmates on their books at the end of the year were as follows: Auckland, 97; Receiving Home, Wellington, 69; Receiving Home, Christchurch, 226; Burnham, 281; Te Oranga Home, 46; Caversham, 508: total, 1,227. Those belonging to private industrial schools were distributed as follows: St. Mary's, Auckland, 130; St. Joseph's, Wellington, 76; St. Mary's, Nelson, 305; St. Vincent de Paul, Dunedin, 27: total, 538.

The cost of the Government schools and the amount recovered (from Charitable Aid Boards, from parents, from sale of farm produce, &c.) are next shown:—

COST OF GOVERNMENT INDUSTRIAL SCHOOLS, 1901.

School.	Gross Cost of School.	Cost of Boarding out (Included in preceding column).	Salaries of School Staff. (Included in first column.)	Recoveries.	Net Cost.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland ..	3,427 18 6	705 16 10	295 11 8	478 18 0	2,[illegible] 6
Horowhenua (proposed)	1,612 11 11	..	62 8 0	..	1,612 11 11
Burnham ..	8,879 5 4	1,461 11 9	1,814 10 2	1,799 4 2	7,080 1 2
Caversham ..	8,189 8 3	3,045 8 5	1,089 6 0	4,933 12 1	3,255 16 2
Te Oranga Home	1,622 14 5	..	330 0 0	21 19 3	1,600 15 2
Receiving Home, Wellington	626 14 4	129 6 8	183 5 0	126 7 10	500 6 6
Receiving Home, Christchurch	1,864 16 2	949 2 0	265 10 3	100 7 11	1,764 8 3
Totals ..	26,222 8 11	6,291 5 8	4,040 11 1	7,460 9 3	18,762 19 8
Salaries and travelling-expenses of Assistant Inspector and Visiting Officers					1,278 7 9
Travelling-expenses of other officers					90 8 6
Contingencies					64 16 3
Total					£20,196 12 2

The next table shows payments made by the Government on account of inmates in private industrial schools, the recoveries, and the net expenditure by the Government. The contributions from Charitable Aid Boards to these schools, being made directly to the managers, are not included in the recoveries shown.

GOVERNMENT EXPENDITURE ON PRIVATE INDUSTRIAL SCHOOLS (R.C.), 1901.

School.	Payments.	Recoveries.	Net Expenditure by Government.
	£ s. d.	£ s. d.	£ s. d.
St. Mary's, Auckland	1,427 9 0	122 15 0	1,304 14 0
St. Joseph's, Wellington ..	284 19 0	17 3 4	267 15 8
St. Mary's, Nelson	1,464 8 11	353 7 3	1,111 1 8
St. Vincent de Paul's, Dunedin	73 0 0	11 5 4	61 14 8
Totals	3,249 16 11	504 10 11	2,745 6 0

During 1901, inmates were maintained in eight other institutions, and the expenditure on this account was as follows: Mission Home, Jerusalem, Wanganui (Mother Aubert's), £96 4s.; St. Mary's, Richmond, Christchurch, £56 17s. 5d.; Samaritan Home, Christchurch, £18 2s.; Mount Magdala, Christchurch, £146 16s. 4d.; Levin Memorial Home, Wellington, £28 12s.; Rescue Home, Auckland, £2 2s.; St. Mary's Home, Karori, £23 8s.; and to a private home (for special treatment), £29 8s. 7d.

The total number of inmates of the two kinds of industrial schools is given for the years 1900 and 1901, and the variations in the numbers boarded out, in residence, or at service:—

INMATES, 1900 AND 1901.

—	Boarded out.				In Residence.				At Service, &c.				Totals.			
	Dec., 1900.	Increase.	Decrease.	Dec., 1901.	Dec., 1900.	Increase.	Decrease.	Dec., 1901.	Dec., 1900.	Increase.	Decrease.	Dec., 1901.	Dec., 1900.	Increase.	Decrease.	Dec., 1901.
Government Schools—																
Auckland	46	2	..	48	16	3	..	19	32	..	2	30	94	3	..	97
Receiving Home, Wellington	..	39	..	39	..	2	..	2	..	28	..	28	..	69	..	69
Receiving Home, Christchurch	..	147	..	147	..	10	..	10	..	69	..	69	..	226	..	226
Burnham	162	..	162	..	108	7	..	115	292	..	126	166	562	..	281	281
Te Oranga Home, Christchurch	..	..	..	..	12	5	..	17	1	28	..	29	13	33	..	46
Caversham ..	194	..	10	184	95	35	..	130	205	..	11	194	494	14	..	508
Private Schools—																
St. Mary's, Auckland	..	..	..	..	100	..	4	96	27	7	..	34	127	3	..	130
St. Joseph's, Wellington	2	..	2	..	49	..	10	39	31	6	..	37	82	..	6	76
St. Mary's, Nelson ..	5	..	4	1	202	..	8	194	100	10	..	110	307	..	2	305
St. Vincent de Paul's, South Dunedin	..	..	..	..	16	3	..	19	8	..	..	8	24	3	..	27
Totals ..	409	188	178	419	598	65	22	641	696	148	139	705	1,703	351	289	1,765

In the Government schools the policy is to board out all children of suitable age and character. The authorities of the private schools do not adopt the boarding-out system.

Institute for the Blind.

The Jubilee Institute for the Blind is a private institution, and is not in any way under Government control, although it has received grants from time to time out of the Consolidated Revenue, and receives payment from the Education Department on account of pupils for whose tuition the department is responsible.

The payments made on behalf of such pupils to the Institute during the year amounted to £332 7s. 10d., towards which the parents contributed £41 8s. The number of pupils at the end of 1901 was fourteen. Attendance is now compulsory for all blind children of school age and sound mind.

School for Deaf-mutes.

The roll of this school includes all the known deaf-mutes of school age and of sound intellect in the colony who have been brought under the notice of the Education Department.

The inclusion in the School Attendance Act of 1901 of provisions dealing with blind and deaf children marks an important step in the education of these unfortunate members of the community. Hitherto many parents, either through carelessness or wilfully, have neglected to send such children to the institutions maintained for their special instruction; but now the Minister of Education has the power to enforce attendance, due provision being made for a contribution by parents towards the cost of maintenance or for free admission where parents are not in a position to contribute. The immediate consequence is an unusual increase in the number of candidates for admission to the Sumner School for Deaf-mutes.

The method of instruction used at Sumner is the oral method, in favour of which there is a vast predominance of expert opinion.

As regards the adoption of that system, the Minister of Education in his annual report remarks, "It is a matter for congratulation that this colony from the first adopted the oral method of teaching, in which children are taught to converse by watching the lips of others. In America, where manual and mixed methods were at first largely in vogue, they are being rapidly discarded in favour of oral instruction, and New Zealand has accordingly been saved the expense and inconvenience of changing from inferior systems of deaf-mute education to that which is now almost universally admitted to be the best."

Sunday Schools.

These are treated of on page 155, the information being obtained as part of the Census results.

Subsidised Public Libraries, 1901–1902.

The number of libraries participating in the vote of £3,000 granted for subsidies shows an increase of twenty over the number aided in the previous year. In order that the purpose intended to be served by the vote may be attained, it is made a condition for participation that the whole of the subsidy granted to each library in the previous year shall have been expended in the purchase of books.

Education Districts.	Number of Libraries.	Income.			Amount on which Subsidy is calculated.			Amount of Subsidy.		
		£	s.	d.	£	s	d.	£	s.	d
Auckland	90	2,406	1	3	3,474	19	11	670	4	0
Taranaki	14	394	7	6	721	19	7	139	4	7
Wanganui	22	962	1	11	1,015	7	0	195	15	2
Wellington	21	2,221	11	3	1,137	2	11	219	4	10
Hawke's Bay	26	620	2	6	1,177	8	6	227	0	9
Marlborough	5	156	3	3	281	3	3	54	4	1
Nelson	24	561	17	3	1,034	8	6	199	9	3
Grey	5	181	4	0	306	4	0	59	0	7
Westland	5	101	12	6	226	12	6	43	13	11
North Canterbury ..	64	1,748	6	8	2,479	7	2	478	3	0
South Canterbury ..	18	515	17	4	848	3	4	163	10	7
Otago	47	803	10	0	1,820	0	0	350	19	1
Southland	27	295	7	6	995	7	6	191	19	9
Special grant to Chatham Islands	1	14	0	0	39	0	0	7	10	5
Totals ..	369	10,982	2	11	15,557	4	2	3,000	0	0

SECTION IX.—LAW AND CRIME.

Civil Cases.

Sittings of the Supreme Court are held for trial of civil cases at Auckland, Gisborne, New Plymouth, Napier, Wellington, and Wanganui, in the North Island; and at Blenheim, Nelson, Hokitika, Christchurch, Timaru, Oamaru, Dunedin, and Invercargill, in the Middle Island.

The number of writs of summons issued in the Supreme Court in 1901 was 485, against 414 in 1900, 511 in 1899, 426 in 1898, 460 in 1897, 529 in 1896, and 511 in 1895. The number of civil cases tried decreased from 145 in 1900 to 116 in 1901. Of these last, 28 were tried before common juries, 5 by special jury, and 83 by Judge without jury. The total of amounts for which judgments were recorded in 1901 was £45,865. There were 54 writs of execution issued during the year.

Fifty-five cases were commenced at twelve District Courts in 1901. Seven of these cases were tried before juries, and 19 before a Judge only, making a total of 26 cases tried. Twenty-six cases lapsed or were discontinued, and in 3 cases judgments were pending. The total of amounts sued for was £9,686, and judgments were recorded for £1,035. Before the Magistrates' Courts 19,136 cases were tried, against 19,816 in 1900; the aggregate sum sued for during 1901 being £315,528, and the total for which judgment was given £175,604.

Court of Appeal.

Five Crown (criminal) cases were reserved from the superior Courts to be brought before the Court of Appeal in 1901. In four cases the convictions were affirmed, and in one the conviction was quashed. There were appeals from 17 civil cases, of which 5 were allowed, 10 dismissed, and in 2 judgments were pending. Judgments were given on 7 other cases removed to the Court of Appeal.

Bankruptcy.

The petitions in bankruptcy during 1901 numbered 222, of which 199 were made by debtors and 23 by creditors. This number is 82 fewer than the number of petitions for the preceding year.

Of the bankruptcies in 1901: in 11 cases the liabilities were under £50; in 44, from £50 to £100; in 66, from £100 to £250; in 45, from £250 to £500; in 30, from £500 to £1,000; in 17, from £1,000 to £2,000; in 7, from £2,000 to £5,000; in 2, £5,000 and upwards.

The following gives the number of petitions, the total amount of the unsecured assets, the amount of debts proved, and the

amount paid in dividends and preferential claims for the years 1896 to 1901 :—

Year.	No. of Petitions in Bankruptcy.	Debtors' Statements of Assets, excluding Amounts secured to Creditors.	Amounts realised by Official Assignees.	Amount of Debts proved.	Amounts paid in Dividends and Preferential Claims.
		£	£	£	£
1896 ..	412	115,455	71,712	256,870	37,492
1897 ..	415	73,466	40,942	133,344	45,015
1898 ..	407	90,068	45,474	285,154	30,994
1899 ..	389	59,434	34,268	158,931	30,084
1900 ..	304	77,689	53,415	141,800	37,411
1901 ..	222	58,658	49,781	84,452	30,358

A special article on the present bankruptcy law of New Zealand was printed in the Year-book of 1894. Reference is made in it to a mode of private assignment, which has come into such frequent use as to militate against conclusions being drawn from a comparison of the figures above given.

Divorce.

In 1898 the Legislature of New Zealand passed a Divorce Act, and the signification of Her Majesty's assent thereto was duly notified by His Excellency the Governor in a Proclamation dated the 1st April, 1899, bringing the Act into operation from the 1st June, 1899.

This Act places persons of either sex practically on an equality as regards petitions for dissolution of marriage; the same grounds, in substance, for a decree of divorce applying to man or woman.

Besides this important alteration of the law, the grounds for divorce are extended as under :—

1. Adultery, on either side.
2. Wilful desertion continuously during five years or more.
3. Habitual drunkenness on the part of husband, along with failing to support wife; or drunkenness and neglect, with unfitness to discharge household duties on the part of the wife.
4. Conviction, with sentence of imprisonment or penal servitude for seven years or upwards, for attempting to take life of petitioner.

Every decree for dissolution of marriage is in the first instance to be a decree *nisi*, not to be made absolute till after the expiration of such time, being not less than three months from the pronouncing thereof, as the Court shall by order from time to time direct.

The petitioner need not necessarily move to make absolute any decree *nisi* that may be pronounced.

A decree for a judicial separation may be obtained either by the husband or wife on the ground of adultery, or of cruelty, or of desertion without cause for a period of two years.

The petitions in 1901 under "The Divorce and Matrimonial Causes Act, 1867," were 139 in number, being 23 in excess of those for 1900: 138 were for dissolution of marriage, and 1 for judicial separation; 103 decrees for dissolution of marriage were granted, and 1 for judicial separation. The proceedings under the Act for the years 1896 to 1901, were as follows:—

Year.	Petitions for		Decrees for	
	Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.
1896	55	6	36	2
1897	48	10	33	1
1898	51	13	32	2
1899	112	1	46	16
1900	111	5	85	3
1901	138	1	103	1

The Act of 1898 has evidently operated in the direction of increasing largely (but probably in the main temporarily) the number of petitions and decrees for dissolution of marriage or judicial separation.

The proportion of petitions and decrees for dissolution of marriage to the number of marriages was up till 1898 higher in New Zealand than in England and Wales, but lower than in New South Wales or Victoria. The full effect of the operation of the new law in New Zealand has now, however, to be experienced.

As early as 1889 an Act was passed in Victoria to allow of divorces being granted for wilful desertion, habitual drunkenness with cruelty or neglect, imprisonment under certain circumstances of either party, and adultery on the part of the husband. This multiplication of the causes for divorce has largely increased the proportion of decrees in that State.

An Act of a similar tenor was passed in New South Wales in 1892, and brought into working in August of that year, under which, and an amending Act of 1893, in addition to adultery since marriage on the part of the wife, and adultery and cruelty on the part of the husband, petitions for divorce can now be granted in that State on any of the following grounds:—

Husband *v.* wife: Desertion for not less than three years; habitual drunkenness for a similar period; refusing to obey an order for restitution of conjugal rights; being imprisoned under a sentence of three years or upwards; attempt to murder or inflict grievous bodily harm, or repeated assaults on him within one year previously.

Wife *v.* husband: Adultery, provided that at the time of the institution of the suit the husband is domiciled in New South Wales; desertion for not less than three years; habitual drunkenness for the same period; refusing to obey an order

for restitution of conjugal rights; being imprisoned for three years or upwards, or having within five years undergone various sentences amounting in all to not less than three years; attempt to murder, or assault with intent to inflict grievous bodily harm, or repeated assaults within one year previously.

To entitle either party to seek relief on these grounds, he or she must have been domiciled in the State at the time of instituting the suit for three years or upwards, and should not have resorted to the State for the purpose of the suit. When a wife seeks for a decree on the ground of three years' desertion, if she was domiciled in New South Wales when the desertion commenced, she shall not be deemed to have lost her domicile by reason of her husband having thereafter acquired a foreign domicile.

The divorces and separations in New South Wales and Victoria since the divorce law has been altered in the direction of increasing the grounds for decrees are as under. With these are given the figures for New Zealand under the old law up to 1898, and according to the new Act for 1899, 1900, and 1901. The figures for New South Wales tend to show that on altering the law there was a large accumulation of cases to get rid of, which increased the number of decrees to a degree which was not subsequently maintained.

	New South Wales.		Victoria.		New Zealand.	
Year.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.
1893	306	9	85	7	25	1
1894	313	14	81	2	20	4
1895	301	11	85	..	18	5
1896	234	8	106	2	36	2
1897	246	13	117	..	33	1
1898	247	17	87	..	32	2
1899*	232	17	105	2	46	16
1900*	219	14	93	..	85	3
1901*	..	..	..	..	103	1

* Act of 1898 in force in New Zealand.

Criminal Cases.

Charges before Magistrates.

The number of charges heard before the Magistrates' Courts in 1901 was 26,265. Repeated charges against the same person are counted as distinct. Of the charges in 1901, 440 were against persons of the aboriginal native race, an increase of 85 on the number for the previous year.

If the Maoris be excluded, the number of charges (exclusive of lunacy) in 1901 is found to have been 25,825, an increase of 1,741 upon the number for 1900; and the proportion per 1,000 of population was 33·20, against 31·54 in 1900.

Persons charged with lunacy and committed to asylums have been excluded from the calculations for this and previous years shown, so that the figures now given will differ somewhat from those appearing in former issues of this book.

The figures, both numerical and proportional, covering a period of twenty years are subjoined:—

CHARGES BEFORE MAGISTRATES.

Year.	Number.	Proportion per 1,000 of Mean Population.	Year.	Number.	Proportion per 1,000 of Mean Population
1882	21,622	42·45	1897	19,390	26·87
1885	22,297	38·89	1898	21,668	29·42
1888	18,370	30·35	1899	22,113	29·48
1891	16,714	26·54	1900	24,084	31·54
1894	16,820	24·76	1901	25,825	33·20

Summary Convictions, and Convictions in Superior Courts.

The summary convictions in 1901 numbered 20,624, including 298 Maoris. 756 persons, 47 of whom were Maoris, were committed for trial at the Supreme and District Courts, a decrease of 17 on the number committed in 1900.

Dealing with the summary convictions, and convictions in the superior Courts, for all offences, the figures for 1897 and onwards (excluding the Maoris) are:—

	Summary Convictions.		Convictions in Superior Courts.	
Years.	Number.	Proportion per 1,000 of Mean Population.	Number.	Proportion per 1,000 of Mean Population
1897—				
Offences against the person	781	1·08	49	0·07
Offences against property ..	1,412	1·96	240	0·33
Other offences	12,205	16·91	14	0·02
Totals	14,398	19·95	303	0·42
1898—				
Offences against the person	690	0·94	53	0·07
Offences against property ..	1,565	2·13	284	0·39
Other offences	13,917	18·90	14	0·02
Totals	16,172	21·97	351	0·48
1899—				
Offences against the person	678	0·90	79	0·11
Offences against property ..	1,549	2·07	273	0·36
Other offences	14,583	19·44	24	0·03
Totals	16,810	22·41	376	0·50
1900—				
Offences against the person	724	0·95	79	0·10
Offences against property ..	1,476	1·93	271	0·35
Other offences	16,285	21·33	19	0·02
Totals	18,485	24·21	369	0·47
1901—				
Offences against the person	778	1·00	91	0·12
Offences against property ..	1,736	2·23	213	0·27
Other offences	17,812	22·90	24	0·03
Totals	20,326	26·13	328	0·42

Including 26 Maoris, the convictions in the superior Courts numbered 354 (persons). Particulars of sentences for these higher Courts, and of the punishments consequent on summary convictions in the lower Courts, are appended in two tables:—

TABLE showing the Sentences of Criminals Tried and Convicted in the Supreme and District Courts during Five Years.

Punishments.	1897.	1898.	1899.	1900.	1901.
Death	2	3	..	1	1
Imprisonment with or without hard labour ..	235	286	306	286	272
Fined	3	19	2	2	17
Imprisonment with whipping	..	2	2	2	1
Released under "The First Offenders' Probation Act, 1886"	63	50	61	74	51
Held to bail, or awaiting pleasure of Court ..	12	21	12	25	12
Sent to lunatic asylum	1	3	..	..	..
Sent to industrial school	..	2	..	1	..
Totals	*316	†386	‡383	§391	‖354

* Including 12 Maoris. † Including 35 Maoris. ‡ Including 7 Maoris. § Including 22 Maoris. ‖ Including 26 Maoris.

TABLE showing the Punishments inflicted consequent on Summary Convictions during Five Years.

Punishments.	1897.	1898.	1899.	1900.	1901.
Fine	6,821	8,149	8,229	9,206	9,905
Fine and imprisonment	5	..	..	..	..
Imprisonment in lieu of fine ..	1,409	1,410	1,762	1,895	1,910
Imprisonment and whipping ..	1	..	..	..	..
Peremptory imprisonment ..	1,579	1,616	1,683	1,723	1,948
Recognisance	123	111	118	121	105
Whipping	28	18	28	15	20
Other	4,432	4,868	4,990	5,525	6,438
Totals	14,398	16,172	16,810	18,485	20,326

N.B.—Maoris have been excluded from this table.

Drunkenness.

During the five years, 1897 to 1901 inclusive, the consumption of beer in the colony per inhabitant would seem to have increased, the proportion having been 7·8 gallons in the earlier year, against 8·9 gallons in the later one. Excluding the Maoris, the same result is found to obtain, the figures being 8·2 for the year 1897 and 9·4 for 1901. Wine and spirits also show an increase in the consumption per head of population.

The following calculations are made to show the results, including and excluding Maoris:—

CONSUMPTION OF BEER, WINE, AND SPIRITS PER HEAD OF POPULATION (INCLUDING AND EXCLUDING MAORIS).

	Including Maoris.			Excluding Maoris.		
	Beer. Gal.	Wine. Gal.	Spirits. Gal.	Beer. Gal.	Wine. Gal.	Spirits. Gal.
1897	7·790	0·138	0·628	8·220	0·146	0·663
1898	7·995	0·139	0·634	8·427	0·146	0·668
1899	8·150	0·141	0·653	8·583	0·148	0·687
1900	8·696	0·145	0·684	9·150	0·152	0·720
1901	8·919	0·151	0·726	9·413	0·159	0·766

The actual quantities of beer, wine, and spirits used in the colony were, for the five years:—

	Beer for Consumption. Gals.	Wine for Consumption. Gals.	Spirits for Consumption. Gals.
1897 ..	5,931,550	105,060	478,136
1898 ..	6,204,700	107,595	491,846
1899 ..	6,437,140	111,049	515,384
1900 ..	6,986,900	116,188	549,932
1901 ..	7,323,290	123,592	596,071

Excluding Maoris, the proportion of convictions for drunkenness per 1,000 of population was 9·18 in 1890, diminishing to 6·60 in 1895, 6·82 in 1896, 7·01 in 1897, 7·41 in 1898, and 8·26 in 1899, but increasing to 9·50 in 1900, and 10·32 in 1901. The number of convictions to which the proportions for the years 1896 to 1901 relate were as under:—

Year.	Number.	Year.	Number.
1896	4,822	1899	6,194
1897	5,060	1900	7,252
1898	5,458	1901	8,032

The totals of charges for drunkenness for the same years were:—

Year.	Number.	Year.	Number.
1896	4,916	1899	6,279
1897	5,156	1900	7,319
1898	5,559	1901	8,086

Among the New-Zealand-born population of European descent there is evidence of less drunkenness than among persons who have come to the colony from abroad. At the census of 1901, out of the total population of New Zealand over 15 years of age, 51·85 per cent. were found to have been born here; while the proportion of the convictions for drunkenness of New-Zealand-born Europeans to the total convictions was in the year 1900 about 17 per cent. only.

The prison statistics show for some years back the number of distinct prisoners received into gaol after being convicted of drunkenness. The figures for the years 1889–1901 are as follow (readmissions of the same person not counted):—

DISTINCT PRISONERS CONVICTED OF DRUNKENNESS RECEIVED INTO GAOL.

Year.	Number.	Year.	Number.
1889	802	1896	515
1890	808	1897	486
1891	694	1898	520
1892	638	1899	610
1893	619	1900	674
1894	457	1901	657
1895	469		

Here the decrease proceeds rapidly and uniformly from year to year until the year 1895, after which the figures rise somewhat. But conclusions cannot be drawn so safely from these prisons statistics as from the convictions for drunkenness previously stated, because the punishment is more often by fine than imprisonment. The convictions showed numbers rising from year to year, but along with the increase in the population of the colony.

In Australia the consumption per head of alcoholic liquors is greater than it is here. The average for three years, according to Mr. Coghlan, is given in the "Seven Colonies of Australasia," and quoted below :—

	Spirits. Gal. Per Head.	Wine. Gal. Per Head.	Beer. Gal. Per Head.
New South Wales	0·77	0·66	10·43
Victoria	0·76	1·62	12·16
Queensland	1·08	0·44	11·41
South Australia	0·43	1·72	9·06
Western Australia	1·54	0·95	24·40
Tasmania	0·48	0·11	8·48
New Zealand	0·69	0·15	8·72

In each of these States, with the exception of Tasmania and South Australia, charges for drunkenness are, in proportion to population, far more numerous than in New Zealand. The order of the States for the year 1900 in this respect is, to quote from the same authority, as under :—

CHARGES OF DRUNKENNESS IN PROPORTION TO POPULATION.

Queensland	18·87 per 1,000
Western Australia	17·48 "
New South Wales	15·51 "
Victoria	13·30 "
New Zealand	9·59 "

"The Inebriates Institutions Act, 1898."

Under this law, the Governor in Council may direct that any building or establishment which is the property of the Crown shall be an institution for inebriates; and he may appoint superintendents, with other officers.

Power is also given to make regulations for the management, supervision, and inspection of these institutions, any of which may be separated into two divisions, with different scales of accommodation, and fees to be paid by patients.

An inebriate may himself make application to a Judge or Magistrate for an order committing him to an institution. Or, if the husband, wife, or any relation or friend of any inebriate applies, the Judge or Magistrate may summon the inebriate to show cause why he should not be committed; when, if necessary, he may be compulsorily dealt with.

There are penalties for improper treatment of patients, and a patient is also liable if misconducting himself. It is also enacted that, during the continuance of an order, an escaped inebriate may be retaken.

A home has been established at Waitati, near Seacliff.

Crime amongst Maoris.

The Native population of the colony has hitherto been regarded as stationary, and comparisons of the numbers of summary convictions by the higher and lower Courts are given. The number for 1897 is swelled by 108 persons convicted of trespass. The figures relating to the convictions by the superior Courts are small and fluctuating, the proportionately large increase in 1898 being caused by the inclusion of sixteen convicted of conspiring to prevent the collection of taxes.

SUMMARY CONVICTIONS OF MAORIS.

Year.	Number.	Year.	Number.
1891	298	1897	450
1892	293	1898	349
1893	253	1899	300
1894	321	1900	253
1895	316	1901	298
1896	332		

CONVICTIONS OF MAORIS IN SUPERIOR COURTS.

Year.	Convictions.	Number of Persons convicted.
1891	7	7
1892	16	15
1893	13	12
1894	25	24
1895	17	15
1896	19	19
1897	16	12
1898	21	35
1899	8	7
1900	22	22
1901	26	26

Prisoners in Gaol.

The total number of prisoners received in the different gaols of the colony during the year 1901 was 4,302, including persons awaiting trial but not convicted within the year, and counting as distinct persons repeated admissions of the same person, as well as transfers from gaol to gaol of convicts undergoing sentence. In 1900 the number received was 3,911, so that the figures for 1901 show an increase of 391. Of 4,302 admissions for 1901, 29 were for debt, and 53 on account of lunacy; while 126 were Maoris imprisoned for various offences. If the debtors, lunatics, and Maoris be excluded, the number of persons received into gaol is reduced to 4,094, against 3,670 in 1900.

The number of persons in gaol (including Maoris) at the end of the year 1901 was 713, or 145 more than in 1900.

PRISONERS IN GAOL (31ST DECEMBER).

Year.	Undergoing Sentence.	Debtors and Lunatics	On Remand and awaiting Trial.	Total.
1889	611	3	19	633
1891	494	4	36	534
1893	463	6	33 ..	502
1895	531	5	46	582
1897	623	..	51	674
1899	508	..	58	566
1900	527	..	41	568
1901	661	1	51	713

Of the prisoners previously convicted received in 1901, 426 men and 49 women had been convicted once; 210 men and 31 women twice; 1,053 men and 452 women three or more times: making a total of 1,689 men and 532 women.

Besides the returns from the Prisons Department, a separate card for each admission is furnished for every gaol. Such cards as show convictions are arranged alphabetically according to name of prisoner, and where several are found referring to the same person, all are thrown out but one; then the number of cards retained equals the actual number of distinct convicted prisoners received in the various gaols during the year. In 1901 this number (excluding Maoris) was 2,345, an increase of 229 on the number in 1900. These figures do not include children committed to the industrial schools simply on the ground that they are neglected or destitute.

The following table shows the number of distinct persons (exclusive of Maoris) received into gaol after conviction during 1901, classified according to nature of offence, religion, birthplace, and age:—

Distinct convicted Prisoners received into Gaol, 1901.

[Note.—In this table a prisoner convicted of more than one offence during the year is reckoned once only, under the heading of the principal offence—e.g., a prisoner convicted three times of drunkenness, twice of vagrancy, and once of theft, is counted only once, under the heading "Theft." Debtors and lunatics received into gaol, and children committed to the industrial schools not convicted of any crime, are omitted.]

	Offences against the Person.				Offences against Property.				Miscellaneous.						Totals.	
	Convicted on Indictment.		Summarily convicted.		Theft and Deceit.		Mischief.		Vagrancy.		Drunkenness.*		Other Offences.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Religions—																
Church of England	28	2	56	3	273	9	18	2	97	44	207	34	192	3	871	97
Roman Catholic	25	3	48	2	129	12	11	1	67	43	201	61	157	1	658	123
Presbyterian	15	1	25	...	73	7	6	1	49	18	87	15	82	2	337	44
Wesleyan	7	1	2	...	38	1	1	...	7	...	15	3	12	1	82	6
Others	6	...	8	1	29	...	4	...	8	5	32	2	32	...	119	8
Totals	81	7	139	6	542	29	40	4	248	110	542	115	475	7	2,067	278
Birthplaces—																
England and Wales	13	...	32	1	145	3	10	...	65	21	178	22	147	3	590	50
Scotland	4	1	16	...	32	3	5	1	37	6	72	9	66	...	232	20
Ireland	11	2	17	2	52	10	5	...	56	28	136	42	63	2	340	86
New Zealand	35	3	50	3	225	13	11	3	53	37	71	34	106	2	551	95
Australian States	7	...	2	...	47	...	2	...	15	8	22	5	25	...	120	13
Other British possessions	1	...	2	...	2	...	1	...	6	3	15	1	12	...	39	4
China	1	...	1	...	2	...	...	...	1	...	...	...	...	...	5	...
Other countries	9	1	19	...	37	...	6	...	15	7	48	2	53	...	190	10
Totals	81	7	139	6	542	29	40	4	248	110	542	115	475	7	2,067	278
Ages—																
Under 10 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 and under 12 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 and under 15 years	...	...	...	...	5	...	...	...	...	...	...	...	...	...	5	...
15 and under 20 years	7	..	5	...	68	3	4	...	2	3	3	1	16	...	105	7
20 and under 25 years	16	1	34	2	103	6	5	2	17	15	25	5	83	...	283	31
25 and under 30 years	17	1	29	...	95	2	2	1	31	7	57	15	79	...	310	26
30 and under 40 years	20	2	39	3	127	8	12	1	67	34	133	31	133	...	531	79
40 and under 50 years	10	..	17	...	77	5	7	...	56	29	135	32	81	4	383	70
50 and under 60 years	6	2	8	1	45	5	5	...	45	19	120	21	58	2	287	50
60 years and over	5	1	7	...	22	...	5	...	30	3	69	10	25	1	163	15
Totals	81	7	139	6	542	29	40	4	248	110	542	115	475	7	2,067	278
Totals, 1900	52	5	126	1	495	26	41	5	190	86	552	122	398	17	1,854	262

* It must be remembered that drunkenness is punished more by fine than by imprisonment, so that the figures in the gaol tables do not represent the full number of persons punished for that offence.

The number of distinct persons (exclusive of Maoris) imprisoned after conviction, in the past twelve years, counting one offence only when the same person was imprisoned more than once, with the proportion per 10,000 persons living, is added:—

Distinct Persons imprisoned after Conviction.

Year.	Prisoners.	Proportion per 10,000 of Population.	Year.	Prisoners.	Proportion per 10,000 of Population.
1890	2,397	38·61	1896	1,936	27·11
1891	2,113	33·55	1897	1,884	25·84
1892	2,164	33·69	1898	1,982	26·92
1893	2,111	31·92	1899	2,125	28·33
1894	1,955	28·78	1900	2,116	27·71
1895	1,930	27·87	1901	2,345	30·14

There has been since 1890 a decrease of 2·17 per cent. in the number of distinct convicted prisoners, and a reduction of 8·47 per 10,000 in the proportion to population. In New South Wales the proportion for 1898 was 66 per 10,000 persons.

It must be understood that the actual number of imprisonments was much in excess of the figures given, as many persons were several times imprisoned, either for offences differing in kind or for repetitions of the same offence. Thus, persons returned as imprisoned for larceny underwent other imprisonments for drunkenness, &c. Some returned as convicted of drunkenness were several times in gaol during the year for the same offence, or for another, such as assault, riotous or indecent conduct, &c. Often there were several charges preferred against the same person at the one time, of which the most serious followed by conviction has been selected.

The proportions in every 100 distinct convicted prisoners belonging to each of the four principal religious denominations, with proportions of prisoners at each age-period, and particulars as to birthplaces and ages, will be found in the Statistical Volume for 1901, on pages 487 and 489.

Cost of Prisoners.

The prisoners in gaols during the year 1901 were maintained at a net cost to the State of £26 14s. 1d. per head, against £29 4s. 6d. in 1900.

Crime amongst the New-Zealand-born.

While the New-Zealand-born formed at the last census 67 per cent. of the whole population of the colony, they contributed in 1901 only 28 per cent. of the prisoners received in gaol. Of the New-Zealand-born population, however, a large number are under 15 years of age, a period of life at which there are very few prisoners; and, therefore, another comparison is necessary. It is found that the New-Zealand-born over 15 years formed 52 per cent. of the total population above that age; but, as before stated, New-Zealanders constituted only 28 per cent. of the total number received in gaols.

The total number of New-Zealand-born distinct prisoners (excluding Maoris) received for the year 1901—646 persons—is found to be 49 in excess of the number for 1900. Of those received in 1901, 86 were under twenty years of age. As before stated, the plan adopted in preparing the foregoing tables is to count each prisoner only once, and to exclude all who are not convicted prisoners, besides dealing only with the number received during the year, instead of with the full number in gaol, which would, of course, include those brought forward from the previous year. The comparative results for a series of years given by this method are held to be more valuable than those brought out by one which includes prisoners merely awaiting trial, and continual repetitions of the same individuals.

Remarks by the Inspector of Prisons.

In his report of the year 1902, the Inspector of Prisons thus comments on the work of the tree-planting prison at Waiotapu, the establishment of which was mentioned in previous Year-books:—

The Gaoler at Waiotapu gives some interesting details of the scheme of employing prisoners in the work of tree-planting. The success that has hitherto attended this experiment naturally leads to inquiry as to why the scheme is not extended to other localities. In the first place, it must be borne in mind that only prisoners of a fairly robust type, well conducted and of quiet habits, can be utilised. The ordinary criminal is, under present conditions, not available, for the reason that his first impulse would be to escape. Some men are safe only under lock and key and behind a fourteen-foot boundary-wall. The class of prisoner required for tree-planting or similar work in the country is the man who is determined to shorten his term of imprisonment by good conduct and industry, whose last thought is to escape, and who therefore needs little supervision. This class is, however, limited in number, and for that reason the scheme referred to cannot be extended as far as one could wish.

First Offenders' Probation Act.

Ninety-seven persons were placed on probation in the year 1901, as against 112 in 1900. Of these, 21 were discharged after satisfactorily carrying out the conditions of their licenses, 5 were rearrested, and 71 remained under the supervision of Probation Officers.

Of the 1,329 persons placed on probation since the introduction of the Act in October, 1886, no less than 1,094 had, by the end of the year 1901, been discharged after satisfactorily carrying out the conditions of their licenses, 80 have been rearrested and sentenced to various terms of imprisonment, 1 committed suicide, 1 died, 32 absconded, 1 was sent to a lunatic asylum, and 119 remained fulfilling the conditions of their terms of probation. The Inspector of Prisons, in his report for the year 1900, made the following remarks, which will well bear repeating:—

From the foregoing it will be seen that a percentage of 83 have done well, while only a percentage of 2·41 have eluded the vigilance of the Probation Officers and absconded. These statistics speak for themselves, and show that the Probation Officers, who do the work gratuitously, have carefully inquired into and made judicious recommendations in the majority of cases, and are deserving of commendation.

The above-quoted results prove beyond doubt that the First Offenders' Probation Act, which was placed on the statute-book of the colony to put first offenders under a term of surveillance that is calculated to give them an extra incentive to good behaviour, and to check predilections that might end in a career of crime, is satisfactorily attaining that end. A probationer has ever before his mind the inevitable consequence which will ensue should he deviate from strictest rectitude of conduct during his probation, while he is not in a position to be contaminated by the evil associations which are almost inseparable from a prison life. The State is relieved of the expense of his support, and there is much more inducement to return to the paths of honesty and industry than there would be were he under bars and bolts inside the walls of a felon's cell; and, lastly, he is not branded as a "gaol-bird."

The amount of costs which the various Courts directed to be paid during the year 1901 was £454, of which £216 6s. 6d. has been actually paid. The approximate cost of keeping these first offenders had they been sent to prison would have amounted to £3,908, which sum, added to the amount of costs, &c., actually paid, gives a saving of £4,124 6s. 6d.

Inquests.

The number of bodies on which inquests were held in 1901 was 980, including 24 Maoris. In 731 cases the bodies were of males, and in 249 of females.

The inquests on suicidal deaths in 1901 show an increase on the number for the previous year. The figures for each of the last six years were:—

Year.	Inquests on Suicides. Males.	Females.	Total.	Year.	Inquests on Suicides. Males.	Females.	Total.
1896 ..	58	12	70	1899 ..	61	13	74
1897 ..	42	11	53	1900 ..	52	11	63
1898 ..	69	8	77	1901 ..	71	13	84

The verdicts given at the inquests held in 1901 may be classified as under:—

Nature of Verdict.	Inquests on Persons. Males.	Females.	Total.
Accident	326	54	380
Disease and natural causes ..	308	174	482
Intemperance	5	..	5
Homicide	4	6	10
Suicide	71	13	84
Execution	1	..	1
Not classed	16	2	18
	731	249	980

Of the accidental deaths, drowning is the most fatal form. The verdicts show that 129 bodies were found drowned, giving a percentage of 33·95 on the accidental deaths from all causes.

Fire Inquests.

The inquests on fires held during 1901 numbered 32. In ten cases the verdict was incendiarism; in three, accident; and in nineteen no evidence was forthcoming.

SECTION X.—THE MAORI POPULATION.

THE census of the Maori population—that is, full-blooded Maoris, with all half-castes living as members of a Native tribe—was taken under the supervision of the officers of the Justice Department in the latter part of February, 1901. The enumeration of the Natives cannot be effected for one particular night, as is done with Europeans, but it is done as quickly and thoroughly as is possible under the circumstances existing.

The enumeration was made to state the names of the Natives in the Sub-Enumerator's books, besides information as to sex, age, principal tribe, sub-tribe, or hapu to which belonging, and particulars as to extent of cultivations owned individually or communally, with live stock.

Enumerators for the Maori census were directed to report on the health of the Natives, which is stated to have been generally good—that is, no epidemic disease was observed, though occasional outbreaks of influenza, fevers, &c., had happened since 1896.

The departmental report of 1st June, 1901, comments thus :—

As a knowledge of sanitary laws increases among the Maoris it may be expected that certain causes of disease will gradually disappear. But it is useless to expect the social habits of a people to conform to another standard all at once. While it it true that social conditions are susceptible of almost infinite modification, it is equally true that such modification can occur only after long periods of time. . . .

The diffusion of knowledge must tend to uplift the Maoris. The transforming powers of education and association are at work, and must in time have their effect. The village schools are steadily improving the general standard of knowledge among the Maori people as a whole, while the higher schools turn out a number of intelligent young fellows who want only the opportunity to show the value of the training they have received. Suitable openings in the public service are limited, but the Government has displayed a sympathetic regard for deserving Maori youths wherever possible. There are now two Native medical students attending the Otago University, and the recent appointment of Dr. Pomare as Native Health Officer is expected to do much good in the direction of sanitary and social reform. Much also is hoped from the Maori Councils Act of last session, which confers on the Natives a limited measure of local self-government, and enables them to regulate and control habits and customs which are harmful alike to the individual and the community. Many of the older chiefs, as well as the educated younger generation, are showing a very intelligent interest in the reform movement, but they want to be shown what to do and how to do it. . . .

The reports of the Enumerators and Sub-enumerators contain much of interest. Crime does not prevail in any marked degree. The Natives as a whole are becoming more and more temperate every year. The drunken orgies that were once common are in a great measure things of the past. In several of the reports reference is made to their adoption of the European style of living; some are sheep-farmers, others cultivate their land, while others again engage in various forms of remunerative labour. Every year the spread of settlement brings them into closer touch with their pakeha neighbours, and subjects them to the influence of European example. Their ultimate destiny must remain a matter of speculation.

The proportion of the Maori population to that of European descent was in the years 1896 and 1901 one Maori to every eighteen Europeans. It is in the North Island that the proportion of Maoris to Europeans is by far the highest, being one in every ten, against one in one hundred and eighty-nine for the South and Stewart Islands.

The percentage of each race to the population was:—

	European Per Cent.	Maori Per Cent.
North Island	90·56	9·44
Middle Island	99·50	0·50
Stewart Island	70·83	29·17
Chatham Islands	49·52	50·48

In February, 1901, the number of Maoris on the principal islands of New Zealand was as shown hereunder:—

	Maoris.			Half-castes living as Members of Maori Tribes (included in the preceding Numbers).		
	Persons.	Males.	Females.	Persons.	Males.	Females.
North Island	40,715	21,919	18,796	2,517	1,379	1,138
Middle Island	1,909	1,022	887	551	288	263
Stewart Island ..	112	66	46	13	5	8
Chatham Islands—						
Maoris	180	90	90	34	14	20
Morioris	31	15	16	18	8	10
Maori wives living with European husbands ..	196	.. ..	196	..	..	..
Totals ..	43,143	23,112	20,031	3,133	1,694	1,439

Besides the half-castes included in the above table, there were 2,407 half-castes (males, 1,188; females, 1,219) living with and enumerated as Europeans at the time of the census.

The above total of 43,143 shows an increase on the population as enumerated in 1896 of 3,289 persons. But the figures for 1896 showed a large decrease, and the increase for the period 1896–1901 is too great to be taken as an absolute fact—at least to the full extent shown. That some degree of increase has recently taken place is highly probable, although averaging the results of the different enumerations of Maoris made since 1878 conveys the idea of a stationary population.

MAORI POPULATION AS ENUMERATED, 1874 TO 1901.

	Persons.	Increase.	Decrease.
1874 (first census)	45,470	..	..
1878	43,595	..	1,875
1881	44,097	502	..
1886	41,969	..	2,128
1891	41,993	24	..
1896	39,854	..	2,139
1901	43,143	3,289	..

Half-castes.

The half-caste population consists of those who live as members of Maori tribes, and others living with and counted as Europeans in the census. Adding the numbers of the two kinds gives the following figures for three censuses :—

Census,	Half-castes living as Members of Maori Tribes. Persons.	Half-castes living as Europeans. Persons.	Total Half-caste Population. Persons.
1891	2,681	2,184	4,865
1896	3,503	2,259	5,762
1901	3,133	2,407	5,540

Here the half-castes who were living as members of tribes are shown as decreasing in number since 1896, while those living as Europeans increased at both periods under review.

Proportions at different Age-groups.

It has been stated that the increase shown by the census of 1901 in the Maori population can scarcely be considered a certainty to the full degree exhibited. The proportions of the people under and over fifteen years are now given for six successive census years, and the figures for 1896 and 1901 tend to show a growing proportion at the earlier ages.

Proportions per 100 Persons Living.—Maoris.

	Males.		Females.	
	Under 15 Years.	Over 15 Years.	Under 15 Years.	Over 15 Years.
1901 ..	35·75	64·25	37·89	62·11
1896 ..	35·28	64·72	36·82	63·18
1891 ..	33·22	66·78	35·22	64·78
1886 ..	31·64	68·36	33·56	66·44
1881 ..	33·65	66·35	34·64	65 36
1878 ..	32 00	68·00	31·63	68 37

The proportions per cent. under 15 years of the young people of either sex are somewhat different from those found in the European population, viz.: Males under 15, 32·24; over 15 years, 67·76; and females under 15, 34·66; and over 15 years, 65·34.

Tribes.

Of the principal tribes residing in the North Island, the Ngapuhi again shows the greatest number of persons, and the next in importance was Ngatikahungunu. Waikato and Ngatiporou had over four thousand persons living. The Arawa had over three thousand, Ngatiraukawa, Rarawa, and Wanganui between two and three thousand each. A complete statement is given :—

Principal Tribes in the North Island.

	Persons.		Persons.
Ngapuhi	6,359	Urewera	1,094
Ngatikahungunu	5,064	Ngaiterangi	913
Waikato	4,457	Ngatiruanui	853
Ngatiporou	4,152	Whanau-a-Apanui ..	711
Arawa	3,547	Taranaki	639
Rarawa	2,842	Whakatohea	598
Whanganui	2,327	Ngatiwhatua	356
Ngatiraukawa	2,084	Unspecified	98
Ngatiawa	1,701		
Ngatimaniapoto	1,570		40,715
Ngatimaru	1,350		

Principal Tribes in the South Island.

	Persons.
Ngatikahungunu	1,549
Ngatiawa	211
Waikato	85
Others	64
	1,909

Principal Tribe in Stewart Island.

	Persons.
Ngatikahungunu	112

Principal Tribes in Chatham Islands.

	Persons.
Ngatiawa	180
Moriori	31
	211

The total number of Maoris in each county, being the localisation of the Natives throughout the colony, will be found on page 103.

SECTION XI.—LOCAL GOVERNING BODIES.

Counties, Boroughs, etc.

For purposes of local government New Zealand is divided into counties and boroughs. Although the boroughs, of which there were 103 in March, 1902, lie geographically within the counties, yet by the law they are not considered as part of them. On the 31st March, 1902, the counties numbered 91. The number is increased from time to time as need is found for further division. In the year 1878 there were only 63 counties. Interior to the counties are the road and town districts, but much of the country is outlying, many road districts having been merged, especially on goldfields territory.

There were, however, 225 road districts (three without Boards) in existence in March, 1902, and 35 town districts. One of these latter is the special Town District of Rotorua, constituted under "The Thermal-Springs Districts Act, 1881." Besides the above there were 30 river protective districts (excluding Inch Clutha, in Bruce County, which is also a road district), 1 drainage district (Christchurch), 2 water-supply districts, and 16 land drainage districts under the Land Drainage Act of 1893 (one without Board). The Harbour Boards numbered 26, excluding Coromandel and Fortrose, for which the County Councils of Coromandel and Southland act as the Harbour Boards.

These bodies levied rates in the financial year 1901–1902 to the amount of £800,471, of which £548,859 consisted of general rates, and £251,612 special and separate rates. The sum of £78,617 was raised by licenses, and £17,736 by other taxes, making £896,824 altogether, which sum is equivalent to £1 2s. 11d. per head of the mean European population. In the year 1900–1901 the local taxation was £1 1s. 9d. per head, or 1s. 2d. less than in 1901–1902.

It will be seen from the table on the next page that since 1881 revenue derived from rates has more than trebled itself, having increased from £249,087 in 1880–81 to £800,471 in 1901–1902. Revenue from Government and other sources has, on the other hand, decreased in the same period, twenty-two years, from £352,540 to less than one-half, viz., £170,041. Receipts which cannot be classed as "revenue" were £889,705 in 1880–81, against £775,432 in 1901–1902; but these figures vary from year to year according to circumstances, such as large operations by way of construction of works, for which money has to be specially raised.

The receipts (distinguishing revenue from other sources of income) and expenditure of the various local bodies, with the amount of rates collected, and the amount of indebtedness on account of loans for each of the past twenty-two years, are shown in the following table:—

LOCAL GOVERNING BODIES.—RATES, RECEIPTS, EXPENDITURE, AND LOANS, 1881 TO 1902.*

Year ended 31st March.	Receipts of Local Bodies.						Expenditure of Local Bodies.†	Outstanding Loans of Local Bodies (excluding Government Loans, for which see the following Columns).	Government Loans to Local Bodies.	
	Revenue from.				Receipts not Revenue.	Total Receipts.			Outstanding Debentures under "The Roads and Bridges Construction Act, 1882."	Net Indebtedness in February of each Year under "The Government Loans to Local Bodies Act, 1886" (including Debentures under the Roads and Bridges Construction Act, converted).
	Rates.	Licenses, Tolls, Rents, and other Sources.	Government.	Total Revenue.						
	£	£	£	£	£	£	£	£	£	£
1881 ..	249,037	461,602	352,540	1,063,229	889,705	1,952,934	1,871,752	3,039,807	..	..
1882 ..	297,328	476,473	218,179	991,980	419,608	1,411,588	1,637,337	3,277,584	..	..
1883 ..	327,129	466,885	133,565	927,579	311,466	1,239,045	1,397,863	3,540,046	..	..
1884 ..	398,659	502,969	241,558	1,143,186	331,994	1,475,180	1,499,117	3,962,330	77,439	..
1885 ..	401,393	477,813	364,082	1,243,288	430,561	1,673,849	1,653,706	4,313,223	123,086‡	..
1886 ..	410,639	504,807	377,811	1,293,257	514,728	1,807,985	1,644,706	4,943,270	134,534	..
1887 ..	434,237	447,631	342,432	1,224,300	992,633	2,216,933	1,885,001	5,620,747	113,072	..
1888 ..	433,832	460,210	334,857	1,228,899	511,594	1,740,493	1,819,787	5,812,803	18,635	191,687
1889 ..	445,929	535,140	141,288	1,122,357	316,139	1,438,496	1,560,605	5,892,050	10,495	273,289
1890 ..	460,303	568,405	139,320	1,168,028	206,688	1,374,716	1,476,540	5,978,059	9,676	319,603
1891 ..	463,581	518,757	144,008	1,126,346	236,902	1,363,248	1,381,320	6,042,693	4,317	367,715
1892 ..	488,824	584,274	109,022	1,182,120	214,124	1,396,244	1,400,467	6,081,934	4,245	449,532
1893 ..	508,157	573,161	136,515	1,217,833	340,538	1,558,371	1,482,548	6,203,869	3,465	525,173
1894 ..	551,412	547,560	134,271	1,233,243	623,038	1,856,281	1,589,124	6,614,824	2,685	547,679
1895 ..	581,868	545,629	138,228	1,265,725	328,798	1,594,523	1,584,518	6,685,510	2,015	621,903
1896 ..	592,903	581,966	156,180	1,331,049	269,145	1,600,194	1,627,079	6,737,578	1,442	667,451
1897 ..	598,526	586,599	178,448	1,363,573	246,919	1,610,492	1,636,716	6,793,398	1,077	709,282
1898 ..	644,552	608,436	182,166	1,435,154	304,645	1,739,799	1,733,016	6,834,361	712	742,530
1899 ..	685,769	642,289	178,438	1,506,496	385,368	1,891,864	1,778,574	6,963,254	347	789,618
1900 ..	714,151	695,988	152,044	1,562,183	372,028	1,934,211	1,960,073	7,057,350	..	810,192
1901 ..	734,023	751,046	168,785	1,653,854	825,039	2,478,893	2,250,572	7,563,069	..	902,769
1902 ..	800,471	848,983	170,041	1,819,495	775,432	2,594,927	2,547,286	7,839,695	..	1,046,645

*The figures for the Christchurch Drainage Board and Harbour Boards included are for the calendar years ended three months previous to the financial years. †Not including balances, deposits, or amounts paid to sinking funds and for redemption of debentures ‡On the 30th June.

The indebtedness of local governing bodies on account of outstanding loans has increased in twenty-two years by nearly 158 per cent., from £3,039,807 to £7,839,695, exclusive of moneys borrowed from Government under "The Roads and Bridges Construction Act, 1882," and "The Government Loans to Local Bodies Act, 1886," which represented a further indebtedness of £1,046,645 at the end of March, 1902.

Taxation by Local Bodies.

Table showing the Revenue of Local Governing Bodies derived from Rates, Licenses, and other Taxes during the Year 1901–1902.

Local Bodies.	Rates.		Licenses.	Other Taxes.	Total.
	General.	Special and Separate.			
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Counties* ...	209,493 15 11	39,350 15 8	18,374 6 5	9,955 16 11	277,174 14 11
Boroughs* ...	173,650 15 9	197,025 8 11	54,408 1 8	5,799 17 10	430,884 4 2
Town Boards* ...	3,161 13 6	207 18 8	3,602 0 6	213 13 8	7,185 6 4
Road Boards* ...	91,864 19 5	11,253 11 0	2,232 10 2	1,763 0 3	107,114 0 10
River Boards* ...	7,349 14 4	938. 5 6	...	3 17 3	8,291 17 1
Land-drainage Boards* ...	2,724 17 9	1,126 16 5	...	...	3,851 14 2
Harbour Boards†	41,370 13 9	...	...	...	41,370 13 9‡
Christchurch Drainage Board†	17,768 4 4	...	...	...	17,768 4 4
Waimakariri-Ashley Water-supply Board*	1,474 9 1	1,708 11 0	...	...	3,183 0 1
Totals ...	548,859 3 10	251,611 7 2	78,616 18 9	17,736 5 11	896,823 15 8§

* For year ended 31st March, 1902. † For year ended 31st December, 1901.

‡ Wharfage dues, charges, fees, tolls, rents, &c., amounting to £407,056 4s. 8d., have not been classed as taxation.

§ Equal to £1 2s. 11d. per head of the mean European population of the colony for the financial year 1901–1902.

Receipts and Expenditure, 1901–1902.

A summary of all the transactions for the year 1901–1902 is given on pages 198 to 200. The total revenue of the local bodies for the financial year was £1,819,495, and they further received a sum of £775,432 which could not properly be termed "revenue," making altogether a grand total of receipts amounting to £2,594,927. The rates formed 44 per cent. of the revenue proper. Licenses, rents, and other sources yielded 47 per cent., and 9 per cent. was granted by the General Government.

While the revenue proper of the counties amounted to £407,827, of which these bodies raised £248,845 by way of rates, the Road Boards' revenue was only £157,955, out of which £103,119 represented the result of their rating. The boroughs had the far larger revenue of £696,029, including £370,676 of rates, and their receipts under the heading of licenses, rents, and other sources amounted to the considerable sum of £309,467. In the matter of receipts from Government, of which a table is printed on the next page, the counties received the bulk of the money.

The details of amounts received, representing Government support to the various bodies, are stated in the following table:—

LOCAL GOVERNING BODIES.—RECEIPTS FROM GOVERNMENT, 1901-1902.

—	Counties.	Boroughs.	Town Boards.	Road Boards.	River Boards (excluding Inch-Clutha, also Road Board).	Land Drainage Boards.	Harbour Boards.	Drainage Board.	Waimakariri Water-supply Board.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Rates on Crown and Native lands...	4 8 11	57 3 1	...	71 7 4	...	...	...	...	...	132 19 4
One-third receipts from land sold on deferred payment and from perpetual lease	19,739 11 9	...	5 16 2	5,292 15 3	...	...	...	...	...	25,038 5 2
One-fourth of rents from small grazing-runs	3,014 6 8	...	...	1,060 17 11	...	...	...	...	...	4,075 4 7
Goldfields revenue and gold duty ...	41,549 17 8	1,137 8 9	8 16 5	757 0 9	...	...	...	...	..	43,453 3 7
Subsidies under the Local Bodies' Finance and Powers Act ...	44,626 18 11	13,724 17 7	763 12 5	18,814 5 0	...	...	...	...	...	77,929 13 11
Fees and fines under the Financial Arrangements Act	970 18 3	489 0 4	2 2 5	8 18 11	...	...	...	...	...	1,470 19 11
Other receipts	440 1 3	477 19 10	207 5 0	7,784 5 2	200 0 0	63 10 0	8,511 17 9	256 8 10	...	17,941 7 10
Total Revenue Account ...	110,346 3 5	15,886 9 7	987 14 5	33,789 10 4	200 0 0	63 10 0	8,511 17 9	256 8 10	...	170,041 14 4
Loans under Government Loans to Local Bodies Act	70,623 12 6	43,962 17 9	600 0 0	23,090 3 9	5,500 0 0	1,400 0 0	...	...	...	145,176 14 0
Grants for special works, &c. ...	113,437 16 2	4,071 5 9	...	902 5 0	15 3 6	...	...	...	...	118,426 10 5
Total receipts from Government	294,407 12 1	63,920 13 1	1587 14 5	57,781 19 1	5,715 3 6	1,463 10 0	8,511 17 9	256 8 10	...	433,644 18 9

Local Governing Bodies.—Receipts, Expenditure, and Loans, 1901–1902.

—	Financial Year ended 31st March, 1902.							
	Counties.	Boroughs.	Town Boards.	Road Boards.	River Boards (excluding Inch-Clutha, also Road Board).	Land Drainage Boards.	Waimakariri Water-supply Board.	Totals.
Receipts:—								
Revenue from—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Rates	248,844 11 7	370,676 4 8	3,369 12 2	103,118 10 5	8,287 19 10	3,851 14 2	3,183 0 1	741,331 12 11
Licenses, rents, and other sources	48,636 10 11	309,466 11 11	7,460 2 2	12,467 7 3	4,670 15 6	126 18 8	52 6 2	382,880 12 7
Government*	110,346 3 5	15,886 9 7	987 14 5	33,789 10 4	200 0 0	63 10 0	...	161,273 7 9
County	...	...	177 4 0	8,579 10 11	...	...	...	8,756 14 11
Total revenue	407,827 5 11	696,029 6 2	11,994 12 9	157,954 18 11	13,158 15 4	4,042 2 10	3,235 6 3	1,294,242 8 2
Receipts not revenue ...	209,895 2 11	350,598 5 4	1,249 7 3	30,873 4 2	5,936 12 5	1,485 0 0	24 9 6	600,062 1 7
Total receipts	617,722 8 10	1,046,627 11 6	13,244 0 0	188,828 3 1	19,095 7 9	5,527 2 10	3,259 15 9	1,894,304 9 9
Expenditure:—								
Public works	444,514 14 10	502,614 1 4	7,488 11 7	138,553 13 7	16,442 12 3	3,635 5 4	1,236 8 10	1,114,485 7 9
Charitable aid and hospitals	37,645 17 1	28,198 15 0	264 7 0	9,899 9 7	...	...	...	76,008 8 8
Management	50,867 11 11	64,083 16 4	1,728 13 5	17,116 15 5	1,498 13 5	430 4 9	234 11 5	135,960 6 8
Other expenditure ...	68,066 8 11	423,578 12 7	2,429 9 0	29,327 3 5	6,580 17 8	1,308 3 2	1,396 15 0	532,687 9 9
Total expenditure ...	601,094 12 9	1,018,475 5 3	11,911 1 0	194,897 2 0	24,522 3 4	5,373 13 3	2,867 15 3	1,859,141 12 10
Liabilities (including loans) ...	946,209 6 3	3,916,891 19 9	6,128 18 7	305,653 8 9	89,046 13 7	30,570 0 4	22,213 0 9	5,316,713 8 0
Loans†	6,714 0 0	3,435,884 0 0	805 0 0	6,728 0 0	43,670 0 0	50 0 0	22,213 0 0	3,516,014 0 0‡

* For amounts under various heads see preceding table; also for specification of loans under Government Loans to Local Bodies Act, and special grants, which are here included with "Receipts not revenue." †Excluding loans under Roads and Bridges Construction Act and Government Loans to Local Bodies Act. For rates of interest see page 203. ‡Not including loans, amounting to £1,046,645, repayable by instalments under "The Roads and Bridges Construction Act, 1882," and "The Government Loans to Local Bodies Act, 1886."

Note.—The return of receipts and expenditure in this summary represents the *net* receipts and expenditure of the year, exclusive of credit and debit balances, bank overdrafts, deposits, amounts paid to sinking funds, and for redemption of debentures

LOCAL GOVERNING BODIES.—RECEIPTS, EXPENDITURE, AND LOANS—*continued.*

—	Financial Year ended 31st December, 1901.		Totals—all Local Bodies.
	Harbour Boards.	Drainage Board.	
Receipts:—			
Revenue from—	£ s. d.	£ s. d.	£ s. d.
Rates	41,370 13 9	17,768 4 4	800,470 11 0
Licenses, rents, and other sources ...	457,053 5 3	291 19 3	840,225 17 1
Government*...	8,511 17 9	256 8 10	170,041 14 4
County	...	...	8,756 14 11
Total revenue	506,935 16 9	18,316 12 5	1,819,494 17 4
Receipts not revenue	166,298 12 0	9,071 19 2	775,432 12 9
Total receipts	673,234 8 9	27,388 11 7	2,594,927 10 1
Expenditure:—			
Public works	334,938 11 11	4,452 6 8	1,453,876 6 4
Charitable aid and hospitals... ...	...	...	76,008 8 8
Management	15,123 12 8	1,502 6 10	152,586 6 2
Other expenditure	319,187 17 8	12,939 11 4	864,814 18 9
Total expenditure	669,250 2 3	18,894 4 10	2,547,285 19 11
Liabilities (including loans)	4,285,973 10 4	205,577 3 5	9,808,264 1 9
Loans†	4,123,631 0 0	200,000 0 0	7,839,695 0 0

* † See notes to table on previous page.

The expenditure of the local bodies amounted to £2,547,286. In the counties the cost of management, including salaries, travelling-expenses, rent, printing and advertising, collection of rates or tolls, legal expenses, and sundries, was £50,868. The Borough Councils expended in the same way £64,084, and the Road Boards £17,117.

The percentages borne by the cost of management to the total receipts and total expenditure were:—

Cost of Management per Cent. of	Total Receipts	Total Expenditure.
Counties	8·2	8·5
Boroughs	6·1	6·3
Road Boards	9·1	8·8

HARBOUR BOARDS.

The amount of receipts and expenditure for each of the Harbour Boards in the colony for the year ended 31st December, 1901, also the liabilities at date of balancing, including outstanding loans, have been tabulated in another statement.

Harbour Boards.	Receipts.					Expenditure (excluding Amounts paid to Sinking Fund and for Redemption of Debentures).				Liabilities (including Outstanding Loans.
	Revenue from			Receipts not Revenue.	Total Receipts.	Works and Maintenance.	Other Expenditure, Interest, &c.	Out of Loan.	Total Expenditure.	
	Wharfage Dues, Charges, Fees, Tolls, &c.	Rates, Rents, and other Sources.	Total Revenue.							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland	39,528 6 2	14,758 4 2	54,286 10 4	40,458 16 7	94,745 6 11	39,675 5 1	31,778 4 3	55,405 12 0	126,856 1 4	449,971 8 9
Bluff	17,480 19 5	2,393 19 4	19,874 18 9	1,737 15 6	21,612 14 3	8,723 8 6	8,365 10 0	..	17,088 18 6	50,516 16 6
Coromandel ...	42 12 8	7 0 0	49 12 8	...	49 12 8	43 8 6	...	...	43 8 6	...
Fortrose	...	10 0 0	10 0 0	...	10 0 0	12 10 0	...	...	12 10 0	...
Gisborne	8,972 19 5	5,970 16 3	14,943 15 8	6,346 1 6	21,289 17 2	868 6 3	11,113 11 0	7,376 13 11	19,358 11 2	204,018 16 2
Greymouth ...	24,720 9 6	913 5 11	25,633 15 5	...	25,633 15 5	15,793 9 6	12,109 12 5	...	27,903 1 11	214,103 6 5
Half-moon Bay and Horseshoe Bay ...	...	...	...	100 0 0	100 0 0	100 0 0	...	...	100 0 0	...
Hokitika	198 9 6	767 16 8	966 6 2	43 9 0	1,009 15 2	136 16 9	990 6 2	...	1,127 2 11	11,923 9 10
Lyttelton	42,368 15 7	2,203 15 11	44,592 11 6	1,333 17 4	45,926 8 10	9,499 10 5	24,533 3 6	6,924 5 11	40,956 19 10	262,302 17 0
Mokau	31 7 2	...	31 7 2	...	31 7 2	...	122 8 7	...	122 8 7	118 1 0
Napier	20,091 13 9	21,296 16 3	41,388 10 0	19 4 1	41,407 14 1	6,886 3 2	28,316 2 9	835 3 5	36,037 9 4	501,696 9 3
Nelson	..	3,732 5 10	3,732 5 10	...	3,732 5 10	77 14 3	568 9 3	...	666 3 6	...
New Plymouth ...	6,940 2 8	11,664 4 9	18,604 7 5	208 8 2	18,812 15 7	7,360 7 7	14,007 16 8	...	21,368 4 3	206,756 18 0
New River ...	732 9 6	99 9 4	831 18 10	75 0 0	906 18 10	553 13 8	986 6 6	...	1,540 0 2	18,231 0 0
Oamaru	7,539 7 5	8,206 0 7	15,745 8 0	20 10 0	15,765 18 0	2,549 14 7	12,070 2 11	...	14,619 17 6	325,159 0 0
Otago	67,768 0 11	13,423 0 9	81,191 1 8	12,156 7 6	93,347 9 2	21,272 18 2	48,705 9 10	...	69,978 8 0	709,475 4 10
Patea	2,025 11 8	442 3 5	2,467 15 1	130 6 4	2,598 1 5	846 4 0	1,633 0 1	...	2,479 4 1	14,269 12 9
Riverton	...	207 2 7	207 2 7	...	207 2 7	58 9 4	140 10 1	...	198 19 5	2,014 14 7
Thames	1,822 13 7	294 1 0	2,116 14 7	...	2,116 14 7	713 13 7	981 10 6	...	1,695 4 1	10,129 12 8
Timaru	22,604 12 8	8,221 15 2	30,826 7 10	21,635 9 1	52,461 16 11	14,081 14 8	15,528 8 5	39,286 1 7	68,896 4 8	247,155 15 2
Waimakariri ...	...	270 6 4	270 6 4	2 5 0	272 11 4	27 4 6	164 10 9	...	191 15 3	454 6 8
Wairoa	487 12 4	248 18 9	736 11 1	1,488 17 3	2,225 8 4	3,021 2 0	501 16 2	...	3,522 18 2	5,055 4 9
Waitara	1,500 9 2	512 15 0	2,013 4 2	0 5 0	2,015 9 2	874 1 9	389 8 4	...	1,263 10 1	24,545 8 3
Wanganui ...	5,326 16 8	2,382 17 9	7,709 14 5	986 2 0	8,695 16 5	3,364 4 2	4,470 5 7	...	7,834 9 9	61,129 15 4
Wellington ...	85,982 17 8	1,780 16 0	87,763 13 8	49,504 0 2	137,267 13 10	10,010 14 9	70,856 8 11	49,185 0 10	130,052 4 6	319,371 8 1
Westport	50,411 15 8	...	50,411 15 8	30,050 8 10	80,462 4 6	88 2 5	44,666 0 10	30,050 8 10	74,804 12 1	647,403 0 0
Whaingaroa ...	146 14 6	37 2 0	183 16 6	...	183 16 6	24 18 7	156 4 4	...	180 2 11	164 0 0
Whangarei ...	311 7 1	34 18 4	346 5 5	1 8 8	347 14 1	298 11 2	53 0 7	...	351 11 9	7 4 4
Totals ...	407,056 4 8	99,879 12 1	506,935 16 9	166,298 12 0	673,234 8 9	146,961 7 4	333,228 8 5	189,060 6 6	669,250 2 9	4,285,973 10 4

NOTE.—The figures relating to the Auckland Harbour Board and totals for the year 1901, differ from those published in the Statistical Volume, ing to an error since discovered and now corrected.

Loans of Local Bodies.

In the succeeding table (page 203) will be found a summary of the amounts raised by loan, classified according to the rates of interest paid, distinguishing loans raised in the colony from those raised abroad. It will be noticed that the amount raised abroad (£5,552,100) is nearly three times as great as that raised in New Zealand (£2,287,595). The lowest rate of interest paid was 3 per cent., but the large sum of £2,828,201 was raised at 5 per cent., and £2,367,740 at 6 per cent., while £126,000 bore interest as high as 7 per cent.

Loans of Local Bodies, March, 1902.—Net Indebtedness and Annual Charge.

	Amount of Debentures and Stock in Circulation.	Amount of Accrued Sinking Fund.	Net Indebtedness.	Annual Charge (excluding Exchange and Commission).		
				Interest.	Sinking Fund.	Total.
	£	£	£	£	£	£
Counties	6,714	932	5,782	325	108	433
Boroughs	3,435,884	378,529	3,057,355	176,829	12,461	189,290
Town Boards	805	107	698	44	30	74
Road Boards	6,728	..	6,728	311	15	326
River Boards	43,670	10,785	33,885	2,249	564	2,813
Water-supply Board	22,213	1,119	21,094	1,125	200	1,325
Harbour Boards	4,123,631	393,904	3,729,727	203,574	21,259	224,833
Drainage Boards	200,050	37,687	162,363	12,003	2,125	14,128
Totals	7,839,695	823,063	7,016,632	396,460	36,762	433,222
Inscribed debt of local bodies under "The Government Loans to Local Bodies Act, 1886" (including inscribed stock exchanged for debentures under "The Roads and Bridges Construction Act, 1882")	1,046,645	..	1,046,645*	..	..	64,343
Totals	8,886,340	823,063	8,063,277	396,460	36,762	497,565

* Repayable by annual instalments of £64,343, representing 4½ per cent. per annum on £918,808, 4 per cent. per annum on £16,322, and 3½ per cent. per annum on £470,539, the amounts inscribed to 1st February, 1902. Repayments on the amount inscribed (£1,405,729, including £89,878 debentures under "The Roads and Bridges Construction Act, 1882," exchanged) would be £1,771,121. The actual repayments to date are £466,809, leaving £1,304,312 to be paid by way of interest and sinking fund on a present indebtedness of £1,046,645.

LOANS OF LOCAL BODIES, RAISED WITHIN AND WITHOUT THE COLONY.

TABLE showing the Amount of Indebtedness of Counties, Boroughs, Town, Road, River, and Water-supply Boards, as on the 31st March, 1902, and of Harbour and Drainage Boards as on the 31st December, 1901, classified according to the Rates of Interest paid, distinguishing Loans raised in the Colony from those raised elsewhere. (See note.)

Loans raised in the Colony.

Local Bodies.	No Interest.	3 %	3¾ %	4 %	4¼ %	4½ %	5 %	5½ %	5½ %	6 %	6½ %	7 %	Total.
	£	£	£	£	£	£	£	£	£	£	£	£	£
Counties	..	..	..	..	..	2,214	4,500	..	..	..	..	..	6,714
Boroughs	25,000	..	..	556,190	57,400	150,725*	187,999	18,000	65,900†	145,270	2,600	63,000	1,272,084
Town Boards ..	..	..	..	..	..	305	..	..	..	500	..	..	805
Road Boards ..	..	..	..	..	..	4,956	1,752	..	..	20	..	..	6,728
River Boards ..	..	..	..	3,200	..	5,000	650	..	3,320	5,500	..	..	17,670
Water-supply Board ..	..	..	1,013‡	..	..	6,000	12,200	..	..	..	..	3,000	22,213
Harbour Boards ..	..	14,031	60,000	718,900	..	38,300	98,650	..	31,000	450	..	..	961,331
Drainage Board ..	..	..	..	..	..	..	50	..	..	..	..	..	50
Total raised in colony	25,000	14,031	61,013‡	1,278,290	57,400	207,500*	305,801	18,000	100,220†	151,740	2,600	66,000	2,287,595

Loans raised outside the Colony.

Boroughs	..	..	..	33,000	..	254,700	785,500	..	..	1,030,600	..	60,000	2,163,800
River Boards ..	..	..	..	..	..	..	21,000	..	..	5,000	..	..	26,000
Harbour Boards ..	..	..	..	366,000	..	100,000	1,715,900	..	..	980,400	..	..	3,162,300
Drainage Board ..	..	..	..	..	..	..	..	..	..	200,000	..	..	200,000
Total raised out of colony	..	..	..	399,000	..	354,700	2,522,400	..	..	2,216,000	..	60,000	5,552,100

Total Loans raised.

Counties	..	..	..	..	..	2,214	4,500	..	..	..	..	..	6,714
Boroughs	25,000	..	..	589,190	57,400	405,425*	973,499	18,000	65,900†	1,175,870	2,600	123,000	3,435,884
Town Boards ..	..	..	..	..	..	305	..	..	..	500	..	..	805
Road Boards ..	..	..	..	..	..	4,956	1,752	..	..	20	..	..	6,728
River Boards ..	..	..	..	3,200	..	5,000	21,650	..	3,320	10,500	..	..	43,670
Water-supply Board ..	..	..	1,013‡	..	..	6,000	12,200	..	..	..	..	3,000	22,213
Harbour Boards ..	..	14,031	60,000	1,084,900	..	138,300	1,814,550	..	31,000	980,850	..	..	4,123,631
Drainage Boards ..	..	..	..	..	..	..	50	..	..	200,000	..	..	200,050
Total loans raised..	25,000	14,031	61,013‡	1,677,290	57,400	562,200*	2,828,201	18,000	100,220†	2,367,740	2,600	126,000	7,839,695

* Including £500 at 4⅜ per cent. and £2,500 at 4¾ per cent. † Including £2,000 at 5·7 per cent. and £3,000 at 5¾ per cent. ‡ Including £1,013 at 3½ per cent.

NOTE.—Not including loans, amounting to £1,046,645, repayable by annual instalments under "The Roads and Bridges Construction Act, 1882," and "The Government Loans to Local Bodies Act, 1886."

From the tables on the preceding pages it will be seen that the total amount owing was, on the 31st March, 1902, £7,839,695. But against this accrued sinking funds to the value of £823,063 were held, leaving a net debt of £7,016,632, exclusive of moneys borrowed from the General Government and repaid by annual instalments.

The total annual charge (excluding exchange and commission) stood at £433,222, of which £396,460 was for interest, and the remainder, £36,762, contributions to sinking fund accounts.

Of the total net indebtedness in 1901–1902 the debt of the Harbour Boards, £3,729,727, formed the largest item, while the Borough Councils owed £3,057,355.

On referring to the comparative table on page 196, a great advance in the outstanding loans of local governing bodies will be noticed. Between 1892 and 1902 the gross indebtedness increased from £6,081,934 to £7,839,695, an addition of £1,757,761 or nearly 29 per cent. during the ten years. During the same period the population advanced at the rate of 24 per cent., and the value of land and improvements (1891–1902) from £122,000,000 to £155,000,000, or at the rate of 27 per cent.

The aggregate interest-charge for the year under review was £396,460, and £295,200 of this was payable on loans raised outside the colony. The average rate of interest payable to bondholders was rather more than £5 1s. 6d. per cent.

While the average rate of interest on the above-mentioned debt is found to be slightly more than 5 per cent., over two millions and three-quarters were raised at 5 per cent., and nearly two and a half millions at 6 per cent. or over.

"The Local Bodies' Loans Act, 1901."

The above Act consolidates certain measures dealing with loans to local bodies. As to Government loans, it contains the same provision as the Amendment Act of 1899 in respect of the debentures of any future loan, and offers, instead of interest payable at 5 per cent. for a term of twenty-six years, one or other of the following alternatives:—

Four and a half per cent. per annum for a term of twenty-six years;

Four per cent. per annum for thirty-two years; or

Three and a half per cent. per annum for forty-one years.

"The Local Bodies' Loans Amendment Act, 1902," empowers the Colonial Treasurer to lend to small boroughs, having at the time of the last preceding census a population of less than 2,000 persons, any sum not exceeding £2,000 in any year for the purpose of making streets within the borough.

Municipal Franchise.

"The Municipal Corporations Act, 1900," with its amending Act of 1902, deals with the franchise in the case of boroughs, and

provides that, in addition to the persons who are already entitled to be enrolled, every person shall be so entitled who possesses the freehold or residential qualifications stated in the Act.

The possession of the freehold qualification is defined as being the beneficial and duly registered owner of a freehold estate in land of the capital value of not less than £25, situated in the borough, notwithstanding that any other person is the occupier thereof, or part thereof, under any tenancy.

Every person is deemed to possess a residential qualification within a borough if he is, and for at least three months last past has been, a residential occupant within such borough.

No person may be entered in the burgess lists in respect of more qualifications than one; but any person who has more than one qualification may select the one in respect of which he wishes to be entered.

In the case of husband and wife, any qualification possessed by one of them is deemed to be possessed by each.

No person enrolled on a burgess roll has more than one vote, and no person enrolled by virtue of the residential qualification can vote on any proposal relating to loans or rates.

Rating on Unimproved Value.

A special article on this system of rating (which it is optional with local governing bodies to adopt or not) is given in Part III. of this work.

Up to the end of April, 1903, fifty-one local governing bodies (thirty boroughs, twelve counties, one town district, and eight road districts) had notified in the *New Zealand Gazette* that the proposal to levy rates on the unimproved value of land had been carried, while in eight cases (boroughs) the proposal had been rejected.

A county having decided to levy rates on the unimproved value, makes it compulsory for all interior Town and Road Boards to adopt the same system of rating. But in counties where the Counties Act is suspended, or where a general rate is not levied, the ratepayers of any Road Board may take a poll on the question. It is also permissible for any Town Board within a county not rating on the unimproved value to adopt that system, the decision to do so having been carried by vote of the ratepayers. The date of the polling did not, in some instances, allow of a rate on the unimproved value being struck for the year ended 31st March, 1902.

The amount of rates levied by the various Borough Councils, County Councils, Town Boards, and Road Boards, with other particulars, as returned by these bodies for the 31st March, 1902, will be found on the following pages:—

Boroughs, 1901–1902.

Name of Borough.	Estimated Area (including Town Belt) in Acres.	Population.	Number of			Amount of Rate levied in the Pound.					Estimated Annual (or renting) Value of Rateable Property, March, 1902.	Capital Value of Rateable Property, March, 1902.	Unimproved Value of Rateable Property, March, 1902.
			Dwellings.	Ratepayers.	Rateable Properties.	General.	Separate.	Special.	Water.	Library.			
						s. d.	s. d.	s. d.	s. d.	s. d.	£	£	£
Whangarei ..	2,038	1,600	340	350	..	0 1½	0 0¾	..	..	..	..	134,606	..
Birkenhead ..	2,700	1,100	242	252	278	1 3	0 2¼	0 3	..	..	7,312	..	..
Devonport ..	640	3,823	746	663	1,205	0 1½	..	½d., ¾d., & 1d.	6d., or 2½ per cent.	..	..	..	211,394
Auckland ..	1,762	35,284	7,507	5,307	7,308	0 9	0 2	1 3	¼ to 2½ per cent.	0 0½	351,821	..	..
Grey Lynn ('01)	900	4,120	800	670	884	1 0	0 3	0 4	¼ to 6 per cent.	..	25,886	..	..
Newmarket ..	150	2,060	416	312	392	1 4	..	0 6	4 to 6 per cent.	..	13,566	..	..
Parnell ..	480	4,575	963	615	863	1 5	..	0 10	4 per cent.	..	31,455	..	..
Onehunga ..	1,200	3,015	820	603	1,000	1 0	..	..	4 per cent.	0 0½	17,868	..	..
Thames ..	2,560	4,200	1,078	863	1,239	1 2	0 4	..	2½ per cent.	0 1	26,408	..	..
Te Aroha ..	200	888	198	208	320	1 3	..	..	0 7	..	6,303	..	..
Waihi* ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hamilton ..	1,600	1,260	420	390	650	0 3	..	..	..	..	..	..	62,000
Cambridge ..	1,083	1,000	263	200	688	1 3	..	..	..	..	6,489	..	..
Tauranga ..	1,000	1,050	386	416	591	2 0	..	0 3	..	..	4,717	..	..
Gisborne ..	1,260	2,750	550	475	820	1 9	..	0 3	..	..	35,000	..	..
New Plymouth	850	4,500	910	820	1,200	1 9	..	0 10	(1)0 6	..	40,307	..	..
Stratford ..	1,920	2,023	450	567	1,020	0 1	..	0 0¾	..	..	..	239,585	..
Hawera (1901)	500	2,131	443	412	610	1 3	..	..	..	..	17,134	..	..
Eltham ..	1,590	1,018	250	240	500	(2)	..	..	..	..	..	..	..
Patea ..	1,420	700	260	197	380	1 3	0 4⅜	..	0 1¾	..	5,945	..	..
Wanganui ..	1,000	7,550	1,560	1,295	1,720	0 10	..	1 0	..	..	61,000	..	..
Marton ..	1,423	1,101	238	249	406	1 0	..	1 6	..	0 0½	9,953	..	..
Feilding ..	3,500	2,500	475	463	880	1 3	..	1 0	..	0 1	19,182	..	..
Palmerston N.	4,593	7,154	1,461	1,217	2,567	0 1¾	..	1/16d., 1/10d., 2⅛d.	2 per cent. under max.	0 0⅛	..	..	331,314

Foxton ..	5,760	1,212	286	320	656	1	3	..	0 $1\frac{1}{4}$	..	0 1	8,710	..	..
Hastings ..	5,740	3,700	825	838	1,321	1	2	..	0 10	..	..	41,340	..	..
Napier ..	879	8,774	1,885	984	2,574	0	9	..	5d. & 10d.	(3)1 to $2\frac{1}{2}$ per cent.	..	86,252	..	..
Dannevirke ..	1,222	2,500	470	453	1,305	1	3	..	3d. & 7d.	$2\frac{1}{2}$ & $3\frac{3}{4}$ per cent.	..	16,265	..	..
Woodville ..	1,240	950	230	472	472	0	$3\frac{5}{8}$	..	..	..	..	..	..	41,286
Pahiatua ..	740	1,209	350	410	460	0	$2\frac{1}{2}$	0 $1\frac{1}{2}$	0 2	..	..	..	..	61,794
Masterton ..	4,311	4,000	622	667	1,104	1	1	..	..	(4)	..	36,200	..	..
Carterton ..	1,880	1,205	280	250	371	0	$0\frac{15}{16}$	..	..	..	..	..	109,597	..
Greytown ..	3,907	1,122	250	230	374	1	6	3d. & 6d.	0 2	..	0 1	9,148	..	..
Lower Hutt ..	3,225	1,950	382	383	529	0	1	0 $0\frac{3}{16}$	..	..	..	..	343,507	..
Petone ..	952	3,780	844	587	1,494	1	0	0 8	0 5	..	..	29,720	..	..
Onslow ..	2,870	1,450	322	360	650	0	2	0 $0\frac{1}{8}$	0 $0\frac{3}{4}$	..	..	..	..	144,944
Wellington ..	1,100	43,638	9,260	5,100	9,958	1	3	0 3	0 $10\frac{3}{4}$	0 $9\frac{3}{5}$	0 1	473,599	..	..
Karori ..	5,127	1,217	220	320	545	0	$1\frac{91}{200}$	0 $0\frac{5}{32}$	0 $1\frac{1}{11}$	..	..	..	..	151,625
Melrose ..	3,962	3,805	761	1,050	1,483	(5)0	$1\frac{3}{4}$	(5)0 $0\frac{1}{4}$	0 $0\frac{1}{6}$	..	..	..	..	332,688
Picton ..	560	875	170	269	980	0	$1\frac{1}{2}$	0 $0\frac{1}{2}$	..	$\frac{1}{4}$d. and $\frac{1}{2}$d.	..	..	70,725	..
Blenheim ..	1,571	3,250	755	580	1,450	1	$1\frac{1}{4}$	0 $2\frac{1}{4}$	0 $2\frac{1}{2}$	..	..	24,890	..	..
Nelson ..	4,800	7,040	1,482	1,175	2,352	1	3	..	0 $3\frac{1}{8}$	2 to $3\frac{1}{2}$ per cent.	..	56,954	..	..
Richmond ..	2,300	590	130	133	151	0	$0\frac{3}{4}$	..	..	(6)4 per cent.	..	..	85,012	..
Motueka ..	5,643	886	168	175	175	0	1	..	..	..	..	..	91,851	..
Westport ..	713	3,000	800	977	1,130	1	8	..	..	..	..	22,000	..	..
Greymouth ..	2,000	4,000	799	628	1,052	0	4	..	(7)0 $0\frac{9}{16}$	..	..	..	..	78,955
Brunner ..	5,700	1,570	340	272	320	1	6	6d. & 9d.	0 10	..	..	3,900	..	..
Kumara ..	842	1,120	296	321	427	0	$0\frac{15}{16}$	0 $1\frac{1}{2}$	...	..	..	..	27,658	..
Hokitika ..	1,280	2,000	650	580	670	0	$1\frac{1}{2}$	0 $1\frac{3}{5}$	0 $0\frac{3}{4}$	..	..	..	..	39,311
Ross ..	4,196	650	300	350	414	0	$1\frac{1}{2}$	0 $0\frac{1}{2}$	..	..	..	..	30,996	..
Rangiora ..	1,040	1,768	400	347	567	0	$0\frac{3}{4}$	..	..	..	..	..	172,097	..
Kaiapoi ..	1,020	1,795	416	365	627	1	3	..	..	..	..	10,325	..	..
Christchurch	1,249	18,538	4,265	2,950	4,789	1	7	2d. & 1s.	$2\frac{1}{4}$d. & 2d.	..	..	246,086	..	..
Linwood ..	659	7,000	1,514	1,201	1,504	0	$1\frac{1}{8}$	0 $0\frac{1}{8}$	(8)	..	..	..	..	169,251
St. Albans ..	1,500	6,650	1,490	1,395	1,783	0	$1\frac{1}{4}$	0 $0\frac{3}{32}$	..	..	..	..	756,372	..
Sydenham ..	1,190	11,816	2,472	2,009	2,449	0	$3\frac{1}{4}$	..	(9)0 $0\frac{1}{3}$	..	..	..	..	247,924
Woolston ..	1,276	2,600	530	565	667	0	$1\frac{1}{4}$	0 $0\frac{5}{32}$	(10)	..	..	..	200,919	..
Sumner ..	4,876	856	228	295	410	1	3	0 2	0 7	(11)$2\frac{1}{2}$ per cent.	..	7,030	..	..
New Brighton	1,500	1,000	220	565	713	1	4	0 2	0 6	..	..	6,914	..	..
Lyttelton ..	2,014	4,021	840	611	797	1	3	..	..	..	..	25,216	..	..
Akaroa ..	221	580	136	130	190	0	$0\frac{15}{16}$	..	..	..	..	..	48,182	..

Boroughs, 1901–1902—*continued.*

Name of Borough.	Estimated Area (including Town Belt) in Acres.	Population.	Number of			Amount of Rate Levied in the Pound.					Estimated Annual (orrenting) Value of Rateable Property in March, 1902.	Capital Value of Rateable Property, March, 1902.	Unimproved Value of Rateable Property, March, 1902.
			Dwellings.	Ratepayers.	Rateable Properties.	General.	Separate.	Special.	Water.	Library.			
						s. d.	d.	s. d.	s. d.	s. d.	£	£	£
Ashburton ..	680	2,300	520	586	..	1 0	..	..	..	..	22,627	..	..
Temuka ..	794	1,500	345	404	639	0 1½	(12)0 0⅝	..	..	..	..	86,872	..
Timaru ..	1,100	6,500	1,503	950	1,825	1 6	..	0 8	1s. or 6d.	..	51,635	..	..
Waimate ..	649	1,400	350	348	500	0 3	..	..	..	..	..	..	45,356
Oamaru ..	1,111	4,836	1,270	1,304	1,547	2 0	..	1 3	(13)	..	30,529	..	..
Hampden ..	640	310	95	117	120	0 1½	..	..	..	..	..	15,633	..
Palmerston S.	800	738	184	248	360	0 1	..	..	..	..	..	41,598	..
Hawksbury ...	2,700	690	164	240	440	0 0½	..	..	..	..	..	45,644	..
Port Chalmers	335	2,056	495	508	576	1 3	..	..	(14)	..	12,262	..	..
North-East Valley	5,980	3,825	760	1,000	1,172	1 0	..	0 6	...	..	19,060	..	..
Maori Hill ..	3,700	1,600	336	362	392	1s., 1s. 3d., & 1s. 6d.	..	..	..	..	10,948	..	..
West Harbour	1,670	1,480	302	480	639	1 0	..	1 0	..	..	8,934	..	..
Dunedin ..	1,800	25,114	6,000	3,200	4,900	1 3	0 4	0 9	(15)	..	268,965	..	..
Roslyn ..	2,000	4,700	961	1,027	1,137	1 0	0 1½	(16)0 3	..	..	32,855	..	..
Mornington ..	654	4,095	819	810	1,002	1 6	..	0 1	..	..	22,772	..	..
Caversham ..	1,073	5,340	1,048	870	1,056	1 3	0 3	0 3	5 per cent.	..	32,727	..	..
St. Kilda ..	463	1,800	375	463	688	1 0	..	0 6	6 per cent.	..	11,129	..	..
South Dunedin	413	5,810	1,162	915	1,173	1 0	0 6	(17)0 6	5s. to 6 per cent.	..	24,689	..	..
Green Island	103	667	138	184	195	1 3	..	..	..	..	2,926	..	..
Mosgiel ..	967	1,500	330	328	533	1 0	..	..	..	..	8,939	..	..
Milton ..	265	1,400	270	215	323	1 6	..	..	..	..	6,989	..	..
Kaitangata ..	1,158	1,462	308	282	528	1 0	0 6	..	..	..	6,778	..	..

Balclutha ..	568	1,040	270	264	310	1	0	..	..	..	0	1	5,252	..	..
Lawrence ..	640	1,165	240	355	300	1	0	..	..	3d. and 6d.	..		8,088	..	..
Roxburgh ..	400	500	122	81	126	1	0	..	..	6d.	..		1,736	..	..
Tapanui ..	126	500	140	80	150	1	9	..	..	..	..		2,013	..	..
Naseby ..	113	550	155	147	167	0	9	..	..	2½, 3½, 6, and 7 per cent.	..		2,333	..	..
Cromwell ..	640	653	140	135	242	1	3	..	..	1 2	..		4,969	..	..
Alexandra ..	840	818	202	170	265	1	0	0 6	0 6	1 0	..		6,280	..	..
Arrowtown ..	390	386	94	101	212	1	6	..	..	..	..		2,010	..	..
Queenstown ..	923	690	196	175	714	1	0	..	0 6	0 6	..		4,850	..	..
Gore ..	1,150	2,500	540	610	1,337	1	0	..	..	..	..		17,624	..	..
Mataura ..	1,530	950	239	216	491	1	3	..	..	..	..		5,866	..	..
Winton ..	160	500	100	120	160	1	3	..	..	..	..		3,021	..	..
Invercargill ..	1,040	6,300	1,225	1,100	1,800	1	0	0 2	1 2	(18)	..		61,644	..	..
North Invercargill	326	925	200	253	320	1	4	..	1 4	..	..		4,036	..	..
South Invercargill	4,000	1,950	381	618	907	1	6	..	1 3	..	..		6,330	..	..
East Invercargill	121	939	192	225	225	1	9	..	0 9	..	..		4,253	..	..
Avenal ..	80	355	75	104	104	1	0	..	..	..	..		1,912	..	..
Gladstone ..	240	335	70	140	140	1	0	..	0 6	..	..		3,792	..	..
Campbelltown	2,000	1,450	356	360	650	1	3	..	..	..	..		9,479	..	..
Riverton ..	718	850	252	230	423	1	3	..	..	..	..		4,264	..	..

(1) For domestic supply; stores, nil.
(2) Rate levied by Hawera County Council.
(3) 1s. 3d. per 1,000 gallons by meter.
(4) Consumption rate, 5 per cent., 2½ per cent., or 1½ per cent.
(5) On capital value, £521,574.
(6) On annual value.
(7) On capital value (for charitable aid purposes).
(8) Fee of 10s. per annum for sanitation; special, $\frac{3}{8}$d., $\frac{1}{20}$d., $\frac{5}{16}$d., over special areas; $\frac{3}{8}$d., $\frac{3}{4}$d., Christchurch Drainage Board.
(9) On capital value, £799,465; Christchurch drainage rate—Sewage area $\frac{3}{4}$d. on capital value, rural area $\frac{17}{32}$d. on unimproved value; Waimakariri River rate, $\frac{1}{10}$d. on unimproved value.
(10) Christchurch drainage rate, $\frac{3}{8}$d.; South Waimakariri rate, $\frac{2}{64}$d.
(11) 2½ per cent. on unconnected property.
(12) West District only.
(13) Maximum under "Municipal Corporations Act, 1900."
(14) In terms of section 102 of "Municipal Corporations Act, 1900."
(15) Under £12 10s., 10s.; under £300, 5 per cent.; over £300, 4 per cent.; land and buildings, half these rates.
(16) Sanitation rate, over part of district.
(17) Dunedin Drainage Board, 2d.; water rate, as per scale, "Municipal Corporations Act, 1900."

* Waihi: In first year.

COUNTIES, 1901–1902.

[NOTE.—For value of land and improvements see Section XXVI.]

Counties.	Area in Square Miles (including Boroughs).	Population, Census, March, 1901, (excluding Boroughs).	Rates struck by County.	
			General.	Other.
Mongonui (no return)	934	2,274	..	
Whangaroa	160	927	1d.	
Hokianga	972	1,767	2½d.*	
Bay of Islands	826	2,587	1d.	
Hobson	688	4,813	1½d.	
Whangarei	928	6,380	¾d.	¾d. separate.
Otamatea	364	2,721	¾d.	½d. and ¾d. separate in outlying districts.
Rodney	566	3,678	¾d.	½d. H. and C.A.; ¾d. separate in Hoteo district.
Waitemata	613	7,035	¾d.	½d. separate in three outlying districts, ¾d. in five; $\frac{5}{16}$d. special in Mairetahi Riding.
Eden	43	19,314	..	
Manukau	791	12,306	..	
Coromandel	403	4,169	1½d.	¾d. on Native lands.
Thames	494	5,043	1½d.	
Ohinemuri	478	9,978	¾d.	¾d. over special water-rate district.
Piako	1,095	2,436	½d.	Separate, ¾d.; Patetere, ½d.; Te Aroha. special, $\frac{1}{10}$d. Taotaoroa and Patetere Ridings.
Waikato	591	3,183	½d.	
Waipa	282	3,580	½d., ¾d.	¾d. separate Hamilton, Mangapiko, and Alexandra outlying districts.
Raglan	824	1,697	½d.	⅛d. H. and C.A.
Kawhia	1,515	1,113	..	
West Taupo	1,594	287	..	
East Taupo	2,581	256	..	
Rotorua	984	1,307	..	
Tauranga	577	1,720	1¼d,1⅜d,1⅝d.*	$\frac{1}{10}$d. H. and C.A.; ½d., ⅜d. special.*
Whakatane (no return)	1,716	779	..	
Opotiki	1,440	1,438	¾d.	¾d. separate in outlying district.
Waiapu	1,121	711	1d.	¾d. special, Tokomaru-Tuakau.
Cook	1,950	6,393	¾d.	Various.
Clifton	1,518	2,535	1d.	⅛d. special, Junction Road loan; $\frac{5}{16}$d. special, Onaero Road loan.

Taranaki (1901)	*386*	19,541	$\frac{3}{8}$d.	$\frac{1}{2}$d. for Eltham Road loan (small portion of county only).	
Hawera	381		$\frac{3}{4}$d.	$\frac{1}{4}$d. separate over Mangatoki, Okaiawa, and Eltham outlying districts.	
Egmont	254				
Stratford	784	5,081	$\frac{1}{2}$d., $\frac{3}{4}$d.	$\frac{1}{2}$d. separate, South, East, and West Ridings; special various.	
Patea	691	2,046	$\frac{3}{4}$d.	$\frac{7}{8}$d. special, Kapara loan, $\frac{3}{4}$d. Omuoa loan; $\frac{3}{4}$d. separate, Kapara Riding.	
Waitotara	343	3,476	1d.		
Wanganui	1,942	4,018	..	$\frac{1}{8}$d., $\frac{3}{8}$d. special, Long Acre; $\frac{7}{16}$d. Denlair, $\frac{1}{16}$d. Waikupu Subdivisions.	
Rangitikei	852	7,570	$\frac{7}{8}$d.	Special, various, in twenty-seven special-rating districts.	
Kiwitea	336	2,844	$\frac{3}{4}$d.	Separate and special, various.	
Kairanga	184	6,778	..		
Oroua	213				
Pohangina	295	1,536	$\frac{3}{4}$d.	$\frac{1}{4}$d., $\frac{1}{2}$d. separate; special, various.	
Manawatu	267	3,000	$\frac{5}{8}$d.	Separate and special, various.	
Horowhenua	591	4,654	$\frac{1}{2}$d., $\frac{5}{8}$d., $\frac{3}{4}$d.	Special, various.	
Wairoa	1,887	1,773	$\frac{3}{4}$d.	Special, $\frac{3}{16}$d., $\frac{5}{32}$d., $\frac{1}{64}$d. in portions of county.	
Hawke's Bay	3,232	6,833	$\frac{3}{4}$d.		
Waipawa	990	9,495	1d., $1\frac{1}{4}$d.*	Special, various.*	
Woodville	164		$1\frac{3}{4}$d.*	$\frac{7}{10}$d. and $\frac{8}{10}$d., special for loans.*	
Patangata	747	2,376	$\frac{1}{2}$d., $\frac{3}{4}$d., 1d., $1\frac{1}{4}$d.	$\frac{8}{50}$d., $\frac{9}{50}$d. special, Oero Riding; $\frac{1}{10}$d. special, Taumumu Riding.	
Pahiatua	302	3,600	$\frac{15}{16}$d.	Fifty-one special, various.	
Akitio	328	1,048	$\frac{1}{2}$d.		
Castlepoint	150	457	$1\frac{1}{2}$d.	Special, various.	
Eketahuna	170	2,332	$2\frac{1}{2}$d.*	Special various.*	
Mauriceville	125	1,127	1d.	Special rates over small rating areas.	
Masterton	670	3,123	$\frac{7}{8}$d.	Separate various.	
Wairarapa South ..	445	5,419	..	$\frac{1}{8}$d. H. and C.A.	
Featherston	965		$\frac{5}{8}$d.	Special, various.	
Hutt	590	7,171	$\frac{1}{4}$d. $\frac{1}{2}$d., $\frac{3}{4}$d.	$\frac{1}{2}$d., $\frac{3}{4}$d. separate; special, various.	
Sounds	573	946	..		
Marlborough	3,812	6,518	..		
Kaikoura	673	1,765	$\frac{3}{4}$d.		
Collingwood	1,029	2,490	$\frac{1}{4}$d.		
Waimea	1,662	7,833	$\frac{2}{4}$d.	$\frac{1}{16}$d. H. and C.A.; $\frac{1}{16}$d. and $\frac{3}{16}$d. special for loans.	
Buller	1,818	4,868	$1\frac{1}{2}$d.	$3\frac{1}{4}$d. special, Charleston Riding; $\frac{3}{8}$d. H. and C.A.	
Inangahua	2,256	4,595	3d. $3\frac{1}{2}$d.*	Two special, $\frac{5}{16}$d., $\frac{1}{2}$d., Reefton Town; $2\frac{1}{2}$d. Boatman's Irrigation District.*	

* On unimproved value.

COUNTIES, 1901–1902—*continued.*

Counties.	Area in Square Miles (including Boroughs).	Population, Census, March, 1901 (excluding Boroughs).	Rates struck by County.	
			General.	Other.
Grey	1,452	4,971	1½d.	⅝d. H. and C.A.
Westland	4,420	4,405	1½d.	
Amuri	2,362	1,142	½d.	¾d., 7/16d., 5/16d., special, for interest on loans.
Cheviot	322	1,120	1d., ⅞d.*	⅛d. special annual recurring rate on £103,630.*
Ashley	1,627	11,599	..	
Selwyn	2,597	30,787	..	⅛d. H. and C.A.
Akaroa	353	3,669	⅝d.	¼d. special.
Ashburton	2,542	11,342	¼d.	½d. Ashburton Forks Public Works District; ¾d. Mount Somers tramway; 1½d. Ruapuna No. 1 and No. 2 Districts; ⅛d. Wakanui Public Works District.
Geraldine	945	5,991	¼d.	⅜d. to 9/16d.
Levels	273	5,496	1d.	
Mackenzie	2,537	1,642	⅝d.	
Waimate	1,343	5,653	⅞d.*	3/10d., ⅝d., 1d. separate.*
Waitaki	2,333	9,086	½d.	Separate, ⅛d. Otepopo, ¼d. Kakanui, 3/16d. Moeraki and Waiareka Ridings.
Waihemo	336	2,014	⅝d.	
Waikouaiti	318	4,082	¾d.	
Peninsula	37	2,561	..	
Taieri (1901)	930	7,179	¾d.	¼d. H. and C.A.
Bruce	503	4,762	⅝d., ¾d.†	3/16d. H. and C.A.; ⅛d. and 5/16d. separate; special, various.
Clutha	946	6,445	¾d.	3/16d. H. and C.A.; ½d. separate, Catlin's and South Molyneux Ridings; special, various.
Tuapeka	1,365	6,272	¾d.	
Maniototo	1,239	3,792	¾d.	
Vincent	2,684	4,362	1d.	1½d., 2½d., special.
Lake	3,712	2,535	1½d.	⅛d. special.
Southland	3,852	22,583	¾d.	⅛d. H. and C.A.; 1/16d. small-birds destruction; ¼d., ⅜d., 5/12d. special in special-rating districts.
Wallace	3,404	7,989	¾d.	⅛d. H. and C.A.; separate rates in four ridings; special 1/20d.
Fiord	3,040	124	..	
Stewart Island	651	253	½d.	¼d. H. and C.A.
Chatham Islands	..	..	..	

* On unimproved value. † Outlying, ¾d.; road districts, ⅝d.

Town Districts, 1901–1902.

Town Districts.	Estimated Population 31st March, 1902.	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value of Property.
					s. d.
Kamo	244	74	78	102	0 0¾
Helensville	550	104	100	124	*0 4
Papakura	280	76	155	202	0 0½
Te Awamutu	350	50	63	75	0 0⅝
Kihikihi	263	62	99	141	0 0¾
Ngaruawahia	300	100	146	140	0 0¾
Rotorua	1,000	250	..	..	..
Opotiki	700	260	185	280	0 0½
Waitara (Raleigh) (1901)	765	169	273	..	0 0¾
Opunake (1901)	466	98	163	478	0 0¾
Inglewood	829	193	173	262	0 0¾(1)
Normanby	356	85	126	126	†0 5
Manaia	430	70	153	341	0 0¾(2)
Waverley	416	108	118	118	0 0¾
Lethbridge (Turakina)	229	54	63	63	*0 8
Bull's	550	122	130	179	*1 0
Halcombe	376	90	147	730	*1 0 (3)
Clyde (Wairoa)	700	130	165	300	0 0½(4)
Taradale	800	160	190	198	0 0½
Ormondville	458	104	151	215	0 2⅝
Waipawa	669	165	125	194	†0 1⅞(5)
Kaikora North	269	60	105	135	*1 0
Featherston	629	120	150	190	0 0¾(6)
Johnsonville	500	108	113	..	0 0½
Havelock	316	76	79	153	0 1
Amberley	417	96	89	130	0 0¾
Southbridge	396	120	240	..	0 0¾
Hampstead	1,234	250	270	320	0 0½
Tinwald	560	111	160	233	0 0⅝
Geraldine	900	210	208	315	0 0¾
Greytown (Allanton), (no return) ..	227	..	..	..	..
Outram	420	61	66	110	0 0¼(7)
Clinton	480	95	124	136	*0 6
Wyndham	417	115	116	354	*1 0
Otautau	475	106	122	186	0 0¾(8)

* On the annual value. † On the unimproved value.

(1) Special rate, ⅛d.
(2) County rate, ⅛d.
(3) Special rate, 1⅝d.
(4) Special rate, ¼d.
(5) Special rate, ⅛d.
(6) Special rate, ⅛d.; separate, $\frac{1}{16}$d.
(7) Water rate 7 per cent. on annual value where water supplied.
(8) Special rate, ⅜d.

Road Districts, 1901–1902.

County and District.	Population (Census, 1901).	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value.
					d.
Mongonui, Whangaroa, Bay of Islands, Hokianga, Hobson — (No road districts.)					
Whangarei—					
Hikurangi	495	80	120	135	‡
Kaurihohore	191	51	56	68	‡
Kensington	49	9	18	18	‡
Maungakaramea	288	70	121	121	‡
Marua	274	63	85	112	‡
Maunu	584	150	142	154	‡
Otonga	300	52	57	59	‡
Parua Bay	215	50	200	255	‡
Ruarangi	103	23	60	65	‡
Waikiekie	205	27	92	211	‡
Waipu North	224	55	55	120	‡
Whareora	92	64	64	80	‡
Otamatea—					
Mangawai	268	50	90	95	‡
Matakohe	423	80	168	250	‡
Mareretu (in first year)	..	..	..	..	..
Whakapirau (no Board)	264	..	..	..	..
Rodney—					
Albertland North	65	12	43	43	‡
Albertland South	322	78	145	190	‡
Ahuroa	41	14	42	72	‡
Komokoriki	62	15	39	44	‡
Mahurangi East	151	33	96	96	‡
Mahurangi Upper	947	195	320	431	*
Mainene	74	11	26	82	‡
Matakana East	132	21	35	35	‡
Matakana West	172	57	67	150	‡
Omaha	357	92	143	204	‡
Puhoi	596	77	130	..	‡
Tauhoa	371	59	92	..	‡
Wharehine	96	20	32	35	‡
Waitemata—					
Kaukapakapa	543	100	182	392	‡
Pukeatua	560	..	220	260	‡
Whangaparaoa	66	25	35	53	‡

* No rate struck.

Road Districts, 1901–1902—*continued.*

County and District.	Population (Census, 1901).	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value.
					d.
Eden—					
Avondale	1,075	225	380	452	¾(1)
Arch Hill	1,671	362	289	467	1s.(2)
Eden Terrace	2,011	421	315	458	¾(3)
Epsom	750	145	144	163	¾
Mount Albert	2,085	320	480	647	¾(4)
Mount Eden	5,129	1150	1,033	1,200	¾(5)
Mount Roskill	581	120	179	255	¾
Mount Wellington	954	198	200	576	¾
One-tree Hill	1,283	190	177	264	¾
Panmure Township	259	70	80	100	¾
Point Chevalier	684	33	42	53	¾
Remuera	2,186	445	406	533	¾
Tamaki West	375	102	115	157	¾
Manukau—					
Awhitu	413	102	130	157	¾
Drury	382	80	151	170	¾
Howick Town	224	71	120	132	¾
Hunua	266	55	131	244	$1\frac{17}{128}$(6)(7)
Karaka	188	40	147	236	¾
Mangere	702	200	205	209	¾
Manurewa	260	59	82	141	¾
Maraetai	82	22	30	36	1¼(7)
Mauku	380	100	160	160	¾(8)
Maungatawhiri	378	50	62	95	¾
Mercer Township	229	50	52	84	¾
Opaheke	369	85	114	280	¾(9)
Otahuhu	1,211	346	289	366	¾
Pakuranga	271	65	74	99	¾
Papakura	373	84	106	117	$1\frac{33}{100}$(7)
Paparata	373	87	114	160	¾
Paparoa	166	46	70	93	¾
Papatoetoe	176	38	39	49	¾
Pokeno	398	71	96	109	¾(10)
Pollok Settlement	88	20	37	46	¾
Pukekohe East	942	216	232	257	¾
Pukekohe West	1,153	231	263	..	¾
Tamaki East	580	115	123	146	¾
Turanga	227	44	67	75	¾(11)
Waipipi	905	220	250	300	¾(12)
Wairoa	792	190	203	310	¾
Waiuku	492	195	215	225	¾
Coromandel, Thames, Ohinemuri	(No road districts.)				

(1) ⅛d. separate.
(2) On annual value; 4½d. special.
(3) ⅝d. special.
(4) Hospital and charitable aid rate, 1d.
(5) ⅛d. special, for lighting.
(6) $1\frac{7}{32}$d., 2⅛d., special, in special districts.
(7) On unimproved value.
(8) $\frac{5}{16}$d. and ⅛d. special.
(9) ⅛d. special.
(10) $\frac{15}{16}$d. special.
(11) ⅜d. special.
(12) ½d. special.

Road Districts, 1901–1902—*continued.*

County and District.	Population (Census, 1901).	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value.
					d.
Piako—					
Matamata	262	50	44	66	½
Waitoa	1,322	244	244	351	¼
Waikato—					
Cambridge	562	95	123	123	½
Kirikiriroa	964	153	251	251	½
Tamahere	248	26	52	52	¼
Whangamarino	443	80	209	421	¼
Huntly	966	100	196	196	¼
Waipa—					
Newcastle	391	82	152	170	¾
Pukekura	810	176	270	420	¾
Rangiaohia	507	81	107	120	¾
Tuhikaramea	98	19	60	60	¾
Raglan—					
Karamu (no Board)	78	..	..	..	..
Onewhero	197	44	60	62	..(1)
Te Akau (no Board)	32	..	..	..	..
Kawhia, West Taupo, East Taupo, Rotorua	(No road districts.)				
Tauranga—					
Katikati	409	82	143	263	$1\frac{7}{16}$(2)
Te Puke	477	140	180	208	(1)
Te Puna	169	36	135	140	(1)
Whakatane, Waiapu, Opotiki	(No road districts.)				
Cook—					
Aroha	58	10	11	11	(1)
Kaiti	700	155	184	280	¾(3)
Ngatapa	489	116	94	101	(1)
Ormond	482	82	94	138	½
Hangaroa (in first year)	..	14	19	28	(1)
Patutahi	638	75	99	230	(1)
Pouawa	85	45	74	110	(4)

(1) No rate struck. (2) On unimproved value. (3) ⅝d. and ½d. special.
(4) No general rate; ½d. 1d., and 2d. special.

Road Districts, 1901-1902—*continued.*

County and District.	Population Census, 1901).	Number of			Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value.
		Dwellings.	Ratepayers.	Rateable Properties.	
					d.
Cook—*continued.*					
Poverty Bay	1,050	129	131	121	(1)
Taruheru	225	48	56	56	(2)
Te Arai	294	54	74	188	(2)
Titirangi	44	10	19	30	(3)
Waikohu	328	68	68	188	(2)
Waimata	264	48	48	50	(2)
Waipaoa	80	9	9	16	(2)
Whataupoko	1,148	215	278	320	¾(4)
Clifton. (No road districts.)					
Taranaki—					
Barrett (1901)	439	77	77	125	½
Carrington (1901)	341	66	85	85	½(5)
Egmont (1901)	635	156	157	301	¼(6)
Elliot (1901)	235	43	51	60	½
Frankley (1901)	231	60	67	67	½
Henui (1901)	393	80	100	133	½
Hurford, Upper (1901)	56	17	17	17	½
Mangorei (1901)	276	47	66	68	½
Moa (1901)	2,836	470	550	600	½(7)
Oakura (1901)	333	100	102	404	½(8)
Okato (1901)	345	61	80	137	½
Omata (1901)	294	62	57	70	½
Parihaka (1901)	1,514	251	352	320	½
Tataraimaka (1901)	152	26	38	38	½
Waitara West (1901)	814	170	170	475	½(9)
Waiwakaiho (1901)	350	75	99	183	½
Egmont. (No road districts.)					
Stratford—					
Manganui	1,734	340	380	500	½(10)
Hawera—					
Waimate	2,619	480	520	712	½(11)
Patea—					
Kohi	166	32	30	30	¾
Motoroa	60	18	20	20	¾
Okotuku	134	24	29	33	¾
Patea East	401	70	84	355	(2)
Patea West	777	190	196	630	(12)
Wairoa	105	22	30	30	¾
Waitotara-Momohaki	496	105	111	160	¾
Whenuakura-Waitotara	313	40	42	42	¾

(1) No general rate; $\frac{5}{16}$d. special. (2) No rate struck. (3) No general rate; ½d. special. (4) ½d. special; ¼d., ½d., 1d., 1½d., separate. (5) ½d. special. (6) ¼d. special; ⅜d., ½d., and ¾d. separate. (7) ½d. special. (8) ¾d. special over special-rating area. (9) ½d. special (10) Special, various. (11) County rate, ½d.; special various. (12) No general rate; ½d special.

Road Districts, 1901–1902—*continued.*

County and District.	Population (Census, 1901).	Number of			Amount of Rate levied in the pound on the Capital, Annual, or Unimproved Value.
		Dwellings.	Ratepayers.	Rateable Properties.	
					d.
Waitotara. (No road districts).					
Wanganui—					
Kaukatea	198	45	41	108	½
Kaitoke	606	125	104	216	¾
Mataongaonga (in first year) ..	..	200	180	301	¾
Mangawhero	973	450	400	700	¾
Purua	904	200	170	272	¾
Wangaehu Upper (no return) ..	695	..	..	..	..
Rangitikei. (No road districts.)					
Oroua—					
Manawatu	2,405	470	551	850	1(1)
Manchester	3,313	764	690	2,155	½(2)
Fitzherbert	724	137	278	405	¾
Kairanga, Pohangina, Kiwitea, Manawatu (No road districts.)					
Horowhenua—					
Otaki	1,280	290	310	1,171	½(3)
Te Horo	512	100	135	500	⅝(4)
Wirokino	2,862	775	750	1,100	½(3)
Wairoa, Hawke's Bay (No road districts.)					
Waipawa—					
Norsewood	1,206	210	280	300	1⅜(1)
Ruataniwha North	651	108	86	97	½(1)
Takapau	608	110	66	90	⅞(1)
Waipawa	274	58	64	78	⅜(1)
Waipukurau	741	121	128	192	1(1)
Patangata—					
Oero	305	..	67	74	½
Patangata	294	47	51	99	3/16
Porangahau	433	90	76	153	½
Taumumu	185	20	17	18	⅜
Wallingford	192	25	28	36	¼
Wanstead	143	21	57	..	(5)
Weber	556	84	131	201	½(6)

(1) On unimproved value. (2) Special and separate, various. (3) Special, various. ¾d. and 1/16d. special. (5) No rate struck. (6) ½d. special.

Road Districts, 1901–1902—*continued.*

County and District.	Population (Census, 1901).	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value.
					d.
Pahiatua, Castlepoint, Eketahuna, Mauriceville, Woodville, Masterton — (No road districts.)					
Wairarapa South—					
Taratahi-Carterton	2,523	560	475	632	$\frac{5}{16}$, 1(1)(2)
Featherston. (No road districts.)					
Hutt—					
Makara	257	39	43	60	$\frac{1}{4}$(3)
Seatoun	432	150	168	168	$\frac{1}{4}$
Sounds. (No road districts.)					
Marlborough—					
Awatere	785	150	210	224	$\frac{3}{4}$
Omaka	1,603	326	394	437	$\frac{3}{4}$
Pelorus	1,218	230	264	423	$1\frac{3}{4}$(4)(1)
Picton	847	188	161	254	$\frac{3}{4}$
Spring Creek	819	136	136	175	$\frac{3}{4}$
Wairau	930	200	195	215	$\frac{3}{4}$
Kaikoura. (No road districts.)					
Collingwood—					
Collingwood	1,078	335	302	550	$\frac{3}{4}$
Takaka	1,342	341	329	783	$\frac{3}{4}$
Waimea—					
Dovedale	286	48	54	88	$\frac{3}{4}$
Moutere Upper	397	105	..	..	(5)
Riwaka	687	145	..	..	(5)
Stoke	1,183	210	..	..	(5)
Suburban North	559	120	..	..	(5)
Waimea West	460	73	86	86	(5)
Buller, Inangahua, Grey, Westland, Amuri — (No road districts.)					
Cheviot (no Board).					

(1) On unimproved value. (2) Special, various. (3) ¼d. special. (4) ¾d. special.
(5) No rate struck.

Road Districts, 1901–1902—*continued.*

County and District.	Population (Census, 1901).	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value.
Ashley—					d.
Ashley	726	500	200	280	3
Cust	713	161	140	192	3
Eyreton	1,566	335	277	277	3
Eyreton West	401	85	77	77	1½
Kowai	1,851	540	650	771	3
Mandeville and Rangiora	2,257	530	431	672	3
Oxford	1,973	550	473	839	3(1)
Waipara	1,695	332	310	540	½
Selwyn—					
Avon	3,889	1130	852	1,097	1s.(2)
Courtenay	2,560	428	463	754	7/16
Ellesmere	3,497	..	608	609	1
Halswell	1,278	220	190	240	2
Heathcote	2,995	500	844	900	3(3)
Lake Coleridge	177	37	30	83	1½
Lincoln	1,213	372	248	317	3(4)
Malvern	965	164	156	309	½
Malvern East	625	139	161	290	1½
Malvern South	428	82	210	340	1½
Rakaia	825	197	192	336	2
Riccarton	5,713	..	1,093	1,334	3(5)
Spreydon	1,457	293	374	415	3(6)
Springs	1,872	460	408	540	1(7)
Taitapu	324	90	67	76	2
Templeton	2,338	505	589	650	7/16(7)
Waimakariri Upper	235	21	13	41	(8)
Akaroa—					
Akaroa and Wainui	1,308	230	256	256	11/16
Le Bon's Bay	316	58	91	91	3(9)
Little River	816	270	180	160	3
Okain's Bay	520	100	96	116	3(9)
Pigeon Bay	258	57	53	60	3
Port Levy	159	31	49	56	1½
Port Victoria	292	55	60	60	2
Ashburton—					
Anama	..	75	77	124	1
Ashburton Upper	2,002	380	600	680	1
Coldstream	319	65	76	94	1
Longbeach	1,335	..	350	..	1⅛
Mount Hutt	1,500	275	266	399	½

(1) Eyre Water-race, 2½d. per acre; View Hill Water-race, 1d. in the pound. (2) 6d. special 1½d., 2d., and 6d. separate. (3) ⅛d. H. and C.A.; 2/64d. Waimakariri; ⅜d. drainage. (4) 2/64d. Waimakariri; 1/5d. separate. (5) ½d. and ⅜d. drainage; 2/64d. and 3/64d. Waimakariri. (6) ⅜d. H. and C.A. (7) 2/64d. Waimakariri. (8) No rate struck. (9) ½d. special.

Road Districts, 1901–1902—*continued.*

County and District.	Population (Census, 1901).	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital, Annual, or Unimproved Value.
					d.
Ashburton—*continued.*					
Mount Somers	928	200	230	230	1
Rangitata	797	108	147	155	3
South Rakaia	1,480	330	345	500	1
Wakanui	1,230	228	280	324	5/16
Geraldine—					
Geraldine	2,250	480	520	844	1
Mount Peel	493	120	122	175	1
Temuka	2,380	512	504	765	1
Levels, Mackenzie, Waimate, Waitaki, Waihemo, Waikouaiti (No road districts.)					
Peninsula—					
Otago Heads	304	44	57	101	3
Peninsula	1,324	219	333	393	1
Portobello	796	365	361	371	1
Tomahawk	137	22	33	44	1
Taieri. (No road districts.)					
Bruce—					
Balmoral	476	68	86	95	(1).
Inch-Clutha (Road and River) ..	344	60	62	73	1/2
Mount Stuart	618	112	129	129	1/2
Clutha, Tuapeka, Maniototo, Vincent, Lake (No road districts.)					
Southland—					
Knapdale	1,596	293	333	396	5/8
Oteramika	2,249	368	461	461	1/2 (2)
Tuturau	733	127	148	164	1/2
Wallace, Fiord, Stewart Island, Chatham Islands (No road districts.)					

(1) No rate struck. (2) ¼d. separate.

SECTION XII.—REPRESENTATION, AND THE GENERAL ELECTION OF 1902.

Representation.

The colony is at present (July, 1903) divided into sixty-eight districts for purposes of European representation—sixty-four rural districts having one member each, and four city electorates three members each. This division was made on the basis of the results of the census of 1901. The Electoral Act of 1902 directs that, in computing for electoral purposes the population of the colony, 28 per cent. shall be added to the country population—*i.e.*, all persons living outside towns of 2,000 inhabitants and over. The total population of the colony (other than Maoris), with the addition aforesaid, having been ascertained, is then divided by the number of members (76), and the quotient thus obtained forms the quota. The four city electoral districts (which have three members each) are so defined in extent that the population shall be three times the quota. Inasmuch as it would be impossible to divide the country into a given number of districts all having exactly the precise quota of population, the law permits the Commissioners to make an allowance of 550 persons by way of addition to or deduction from the population of rural districts, and of 100 in case of city electorates, with special provision for districts where the population is partly city and partly rural, so that more consideration can be given to community of interest, facilities of communication, and topographical features, in constructing the districts.

But, although the above describes the existing state of affairs, the present electoral districts were formed in accordance with the laws in force prior to 2nd October, 1902, when the allowance by way of addition to or deduction from the population of rural districts was 1,250.

The Act provides for two permanent Commissions, called the "North" and "South" Island Representation Commissions. These sit together as a joint Commission for the purpose of fixing the number of districts for the North and South Islands respectively, but afterwards act separately and independently of one another, the duties and functions of each being confined to their respective island.

The North Island with its adjacent islands includes 34 electoral districts, having 38 members; the South and Stewart Islands having also 34 districts and 38 members. In 1896 and in 1899 the North Island returned 34 and the South Island 36 members; but

since then six new rural districts have been created, by which the North Island has gained four and the South Island two members.

These districts are, as before stated, for purposes of European representation. But the colony is again divided into four districts for purposes of Maori representation, under the electoral law, each district having one Native member elected by the Maoris; making the House of Representatives consist of 80 members altogether—76 Europeans and 4 Maoris.

The Electoral Law.

By the Act which came into force in 1893 the great step was taken of admitting women to the franchise. The Amendment Act of 1896 abolished the non-residential or property qualification, with a saving clause in favour of then-existing registrations in respect of such qualification. "The Electoral Act, 1902," consolidates the whole of the electoral laws, and amends the same where necessary.

Electors are enrolled on sending to the Registrar a claim and declaration according to a prescribed form. There are no fixed periods for making up fresh electoral rolls, but the rolls are revised and printed before a general election, and also for any district in which a by-election is to take place. Nor are there any fixed periods for the revising and purifying of the rolls. It is the duty of the Registrar of each electoral district to keep the rolls revised and complete.

The General Election of 1902.

For European Representatives.

[Polling-day, 25th November, 1902; number of polling-places, 1879.]

Dealing with the population of both sexes, it is found that the total number of persons on the rolls was 415,789, out of a total adult population estimated at 429,385. These figures give a proportion of 96·83 per cent. of adults who were registered as electors, as against 96·79 at the previous election in 1899, 95·11 in 1896, and 94·98 in 1893. The number of persons who voted, or who went to the poll, was 318,859, or 76·69 per cent. of the number on the rolls, a slightly smaller proportion than obtained in 1899, which was 77·59 per cent.

Date of General Election.	Estimated Total Adult Persons.	Number on Rolls.	Proportion of Adult Persons registered as Electors.	Number of Persons who voted.	Proportion of Persons on Rolls who voted.
1893	319,010	302,997	94·98	220,082	75·25*
1896	356,658	339,230	95·11	258,254	76·13
1899	386,146	373,744	96·79	279,330	77·59*
1902	429,385	415,789	96·83	318,859†	76·69

* Excluding figures for three electorates in which there was no contest.
† Including 4,974 informal votes.

Dealing with men only, the number on the rolls was 229,845, or only 3,757 short of the full number of adult males in the colony as estimated for the day of the election. The males who voted in 1902 were 180,294, or 78·44 per cent. of those on the rolls, against 79·06 per cent. in 1899.

Date of General Election.	Estimated Total Adult Males.	Number of Men on Rolls.	Proportion of Adult Males registered as Electors.	Number who voted.	Proportion of Males on Rolls who voted.
1893	179,539	193,536	†	129,792	69·61*
1896	197,002	196,925	99·96	149,471	75·90
1899	214,773	210,529	98·02	159,780	79·06*
1902	233,602	229,845	98·39	180,294‡	78·44

* Excluding figures for three electorates in which there was no contest.
† The number on the rolls was in excess of the estimated adult male population at the date of the election.
‡ Including informal.

The figures relating to women show that a lesser proportion (94·97 per cent.) of adults were registered as electors in 1902 than in 1899 (95·24 per cent.). The number of women who voted, 138,565, is 74·52 per cent. of the females on the rolls, while in 1899 there were 119,550 who voted, giving the higher proportion of 75·70 per cent.; so that (assuming the figures to be correct) there is no evidence of a greater willingness now on the part of the females to go to the poll.

Date of General Election.	Estimated Total Adult Females.	Number of Women on Rolls.	Proportion of Adult Females registered as Electors.	Number who voted.	Proportion of Females on Rolls who voted.
1893	139,471	109,461	78·48	90,290	85·18*
1896	159,656	142,305	89·13	108,783	76·44
1899	171,373	163,215	95·24	119,550	75·70*
1902	195,783	185,944	94·97	138,565†	74·52

* Excluding figures for three electorates in which there was no contest.
† Including informal.

The following table shows for the different districts the number of electors of each sex on the rolls, with the voters (including those whose votes were informal), and the population as at last Census :—

Electoral Districts.	Number of Members.	Population as at Census, 31st March, 1901.	Number of Electors on Roll.			Number of Voters who recorded Votes (including informal).		
			Males.	Females.	Total.	Males.	Females.	Total.
Bay of Islands ..	1	8,372	2,430	1,586	4,016	1,753	1,052	2,805
Kaipara	1	9,519	3,099	1,635	4,734	2,309	1,270	3,579
Marsden	1	9,798	2,896	1,990	4,886	2,358	1,515	3,873
Waitemata ..	1	10,782	3,244	2,534	5,778	2,430	1,730	4,160
Eden	1	9,553	2,559	2,543	5,102	1,918	1,776	3,694
Auckland, City of ..	3	35,687	10,424	9,552	19,976	8,267	6,849	15,116
Grey Lynn ..	1	9,716	2,487	2,932	5,419	1,956	2,196	4,152
Parnell	1	10,511	2,980	3,208	6,188	2,030	1,919	3,949
Manukau ..	1	10,364	2,746	3,106	5,852	2,231	2,379	4,610
Franklin	1	9,523	2,766	2,085	4,851	2,089	1,346	3,435
Thames	1	10,708	2,820	2,681	5,501	2,275	1,967	4,242
Ohinemuri ..	1	9,834	3,453	1,828	5,281	2,527	1,367	3,894
Waikato	1	9,491	3,008	2,228	5,236	2,548	1,732	4,280
Bay of Plenty ..	1	10,897	4,045	1,683	5,728	2,815	1,596	4,411
Waiapu	1	9,905	3,930	2,351	6,281	3,139	1,835	4,974
Hawke's Bay ..	1	10,701	3,406	2,174	5,580	2,096	1,165	3,261
Napier	1	11,343	2,591	2,892	5,483	2,161	1,899	4,060
Waipawa	1	10,572	3,153	2,025	5,178	2,279	1,314	3,593
Pahiatua ..	1	9,444	2,755	1,863	4,618	2,201	1,354	3,555
Masterton ..	1	10,283	3,084	2,248	5,332	2,412	1,586	3,998
Wairarapa ..	1	8,408	2,861	1,889	4,750	2,465	1,609	4,074
Egmont	1	9,582	3,092	1,912	5,004	2,303	1,278	3,581
Taranaki	1	9,820	2,959	2,584	5,543	2,542	2,037	4,579
Hawera	1	10,132	3,347	2,430	5,777	2,669	1,834	4,503
Patea	1	10,568	3,948	2,439	6,387	3,034	1,832	4,866
Rangitikei ..	1	8,480	3,352	1,744	5,096	2,457	1,114	3,571
Wanganui ..	1	11,196	3,678	2,826	6,504	2,741	2,215	4,956
Oroua	1	9,435	2,816	1,899	4,715	1,782	1,461	3,243
Palmerston ..	1	10,555	3,450	2,666	6,116	2,638	2,028	4,666
Manawatu ..	1	9,057	2,752	1,726	4,478	2,014	1,238	3,252
Otaki	1	8,347	2,117	1,626	3,743	1,559	1,017	2,576
Hutt	1	10,451	2,775	2,289	5,064	2,157	1,763	3,920
Wellington, City of	3	35,836	11,063	10,155	21,218	8,669	7,312	15,981
Newtown ..	1	11,701	3,418	3,247	6,665	2,670	2,447	5,117
Nelson, City of ..	1	11,284	2,717	2,800	5,517	2,267	2,075	4,342
Motueka	1	9,872	2,703	1,757	4,460	1,796	907	2,703
Buller	1	10,747	3,355	2,076	5,431	2,665	1,487	4,152
Grey	1	10,255	3,415	2,096	5,511	2,297	1,154	3,451
Westland ..	1	8,662	2,862	1,806	4,668	2,124	1,153	3,277
Wairau	1	10,784	3,121	2,234	5,355	2,643	1,779	4,422
Hurunui	1	8,847	2,807	1,712	4,519	2,279	1,298	3,577
Kaiapoi	1	8,500	2,479	2,246	4,725	2,134	1,852	3,986
Avon	1	10,394	2,672	2,989	5,661	2,130	2,155	4,285
Christchurch, City of	3	35,826	9,663	10,106	19,769	8,367	8,458	16,825
Riccarton ..	1	8,475	1,922	2,409	4,331	1,404	1,908	3,312
Ellesmere ..	1	8,338	2,116	1,774	3,890	1,724	1,242	2,966
Lyttelton ..	1	10,465	2,502	2,364	4,866	1,960	1,982	3,942
Courtenay ..	1	8,430	2,335	1,892	4,227	1,801	1,352	3,153
Selwyn	1	9,231	2,608	1,731	4,339	2,017	1,222	3,239
Ashburton ..	1	10,497	3,422	2,454	5,876	2,772	1,962	4,734
Geraldine ..	1	8,787	2,387	1,918	4,305	2,058	1,575	3,633
Timaru	1	10,651	2,988	2,869	5,857	2 679	2,245	4,924

Electoral Districts.	Number of Members.	Population as at Census, 31st March, 1901.	Number of Electors on Roll.			Number of Voters who recorded Votes (including informal).		
			Males.	Females.	Total.	Males.	Females.	Total.
Waitaki	1	8,654	2,685	1,760	4,445	2,043	1,422	3,465
Oamaru	1	10,098	2,764	2,457	5,221	2,382	2,025	4,407
Mount Ida ..	1	8,361	2,721	1,575	4,296	2,174	1,180	3,354
Waikouaiti ..	1	8,912	2,324	2,009	4,333	1,767	1,336	3,103
Chalmers ..	1	10,945	3,016	3,015	6,031	2,345	2,324	4,669
Dunedin, City of ..	3	35,297	11,016	12,117	23,133	8,436	8,968	17,404
Caversham ..	1	11,533	3,100	3,242	6,342	2,727	2,808	5,535
Taieri	1	9,027	2,556	2,171	4,727	2,132	1,690	3,822
Bruce	1	8,405	2,686	2,185	4,871	2,103	1,826	3,929
Tuapeka	1	8,557	2,895	1,804	4,699	2,307	1,384	3,691
Clutha	1	9,481	2,827	2,147	4,974	2,245	1,476	3,721
Wakatipu ..	1	10,226	3,066	1,881	4,947	2,536	1,422	3,958
Mataura	1	10,710	3,524	2,531	6,055	2,943	2,016	4,959
Awarua	1	10,286	2,816	2,019	4,835	2,195	1,580	3,775
Invercargill ..	1	11,159	3,163	3,176	6,339	2,660	2,556	5,216
Wallace	1	10,237	3,108	2,046	5,154	2,688	1,714	4,402

Particulars are given for the four city electorates, where the electors have the right of voting for three members. The number of votes exercisable is more than twenty-eight thousand in excess of those recorded, so that some of the electors evidently voted for only one or two candidates. It is interesting to note, that for the two northern cities (Auckland and Wellington) in the number of electors on the rolls and the number who recorded their votes the males exceeded the females, while for the two city electorates in the South Island (Christchurch and Dunedin) the women voters outnumbered the men.

City.	No. of Members returned.	Electors on Rolls.			Voters who recorded Votes.			No. of Votes recorded.	No. of Votes exercisable by persons who voted.
		Men.	Women.	Total.	Men.	Women.	Total.		
Auckland ..	3	10,424	9,552	19,976	8,267	6,849	15,116	40,119	45,348
Wellington ..	3	11,063	10,155	21,218	8,669	7,312	15,981	42,365	47,943
Christchurch ..	3	9,663	10,106	19,769	8,367	8,458	16,825	45,056	50,475
Dunedin ..	3	11,016	12,117	23,133	8,436	8,968	17,404	39,567	52,212
Total ..	12	42,166	41,930	84,096	33,739	31,587	65,326	167,107	195,978

A return is added showing the number of votes recorded for each candidate, and from this it will be seen that in thirteen instances

the deposits were forfeited, the number of votes received in each case having been less than one-tenth of the number polled by the successful candidate. One candidate, Mr. F. W. Isitt, was nominated for ten separate districts, and one, Mr. D. Whyte, for two districts:—

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
Bay of Islands:		
Houston, R. M.	1,593	
Glass, A. G. C.	1,183	2,776
Kaipara:		
Harding, A. E.	1,183	
Stallworthy, J.	824	
Peacocke, G. L.	730	
Bassett, T.	529	
Newman, C.	288	3,554
Marsden:		
Mander, F.	1,951	
Thompson, R.	1,893	3,844
Waitemata:		
Alison, E. W.	2,409	
Hatfield, A. J.	1,695	4,104
Eden:		
Bollard, J.	2,628	
Cheal, P. E.	1,000	3,628
City of Auckland:		
Witheford, J. H.	7,854	
Baume, F. E.	7,540	
Kidd, A.	5,786	
Richardson, W.	4,852	
Napier, W. J.	4,271	
Rosser, A.	3,504	
French, R.	3,055	
Hanan, J. H.	2,016	
Fawcus, J.	966	
Bradly, A. P.	217	
Simson, H. N.	58	40,119
Grey Lynn:		
Fowlds, G.	2,108	
Masefield, T. T.	1,990	4,098
Parnell:		
Lawry, F.	1,996	
Shera, J. M.	1,872	3,868
Manukau:		
Kirkbride, M. M.	2,372	
O'Rorke, Sir G. M.	2,145	4,517
Franklin:		
Massey, W. F.	2,297	
Harris, A. R.	1,121	3,418
Thames:		
McGowan, J.	2,458	
Lucas, W. H.	1,573	
Isitt, F. W.	36	4,067
Ohinemuri:		
Moss, E. G. B.	1,527	
Palmer, J.	1,341	
Poland, H.	996	3,864
Waikato:		
Lang, F. W.	2,234	
Greenslade, H. J.	2,009	4,243
Bay of Plenty:		
Herries, W. H.	2,110	
Lundon, D.	1,434	
Jordan, C.	429	
Taylor, J. E.	387	4,360
Waiapu:		
Carroll, J.	3,232	
Isitt, F. W.	1,562	4,794
Hawke's Bay:		
Russell, Sir W. R.	2,330	
Isitt, F. W.	887	3,217
Napier:		
Fraser, A. L. D.	2,739	
Eames, R. J.	1,249	3,988
Waipawa:		
Hall, C.	2,556	
Taylor, J.	988	3,544
Pahiatua:		
O'Meara, J.	1,796	
Bolton, S.	1,459	
Gould, A. W.	268	3,523
Masterton:		
Hogg, A. W.	2,451	
Cooper, J. C.	1,503	3,954
Wairarapa:		
Buchanan, W. C.	2,049	
Hornsby, J. T. M.	1,983	4,032

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
Egmont:		
Jennings, W. T.	1,765	
Leech, C.	1,750	3,515
Taranaki:		
Smith, E. M.	2,419	
Okey, H. J. H.	2,105	4,524
Hawera:		
Major, C. E.	2,233	
McGuire, F.	2,212	4,445
Patea:		
Symes, W.	2,638	
Haselden, F. H.	2,187	4,825
Rangitikei:		
Remington, A. E.	1,399	
Birch, W. J.	1,152	
Reardon, M. J.	537	
Hornblow, R. E.	358	
Smith, J.	69	3,515
Wanganui:		
Willis, A. D.	2,866	
Baker, J. W.	1,428	
Lundon, G.	586	4,880
Oroua:		
Lethbridge, F. Y.	1,911	
Tompkins, A. H.	1,293	3,204
Palmerston:		
Wood, W. T.	2,230	
Hodder, T. R.	1,896	
Manson, H. J.	511	4,637
Manawatu:		
Vile, J.	1,691	
Stevens, J.	1,515	3,206
Otaki:		
Field, W. H.	2,006	
Isitt, F. W.	496	2,502
Hutt:		
Wilford, T. M.	2,115	
Pirani, F.	1,674	
Collier, J. H.	90	3,879
City of Wellington:		
Aitken, J. G. W.	7,808	
Duthie, J.	6,886	
Fisher, G.	6,685	
O'Regan, P. J.	6,304	
Atkinson, A. R.	6,094	
Findlay, J. G.	4,764	
Godber, J.	1,437	
Jellicoe, E. G.	1,384	
McLaren, D.	1,003	42,365
Newtown:		
Barber, W. H. P.	1,385	
Hislop, T. W.	1,357	
Luke, C. M.	1,100	
Chapple, W. A.	1,017	
Tustin, W. G.	159	5,018
City of Nelson:		
Graham, J.	2,156	
Atmore, H.	1,633	
Piper, J.	521	4,310
Motueka:		
McKenzie, R.	2,256	
Isitt, F. W.	418	2,674
Buller:		
Colvin, J.	3,370	
Isitt, F. W.	769	4,139
Grey:		
Guinness, A. R.	2,764	
Isitt, F. W.	619	3,383
Westland:		
Seddon, Rt. Hon. R. J.	2,983	
Isitt, F. W.	237	3,220
Wairau:		
Mills, C. H.	2,401	
Duncan, J.	1,990	4,391
Hurunui:		
Rutherford, A. W.	1,577	
Reece, H. F.	880	
Meredith, R.	834	
Forbes, G. W.	205	
Pulley, G. T.	68	3,564
Kaiapoi:		
Buddo, D.	2,558	
Hassall, A. D.	1,302	3,860
Avon:		
Tanner, W. W.	1,680	
Brunt, J. R.	1,632	
Loughrey, A.	871	
Myers, J. S.	37	4,220
City of Christchurch:		
Taylor, T. E.	8,122	
Ell, H. G.	7,924	
Davey, T. H.	6,331	
Collins, W. W.	5,982	
Smith, G. J.	5,980	
Turnbull, A. H.	4,648	
Taylor, C.	4,491	
Allison, C.	1,393	
Baynes, B.	185	45,056

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
Riccarton:		
Witty, G. ..	1,776	
Russell, G. W.	1,491	3,267
Ellesmere:		
Rhodes, R. H.	1,719	
Thornton, C. R.	1,218	2,937
Lyttelton:		
Laurenson, G.	3,041	
Rollitt, W.	869	3,910
Courtenay:		
Lewis, C. ..	1,535	
Rennie, J. ..	1,185	
Barrett, J. ..	401	3,121
Selwyn:	...	
Hardy, C. A. C.	1,594	
Ivess, J. ..	1,051	
Wilson, K. ..	554	3,199
Ashburton:		
McLachlan, J.	2,132	
Studholme, J., jun.	1,693	
Brock, W. ..	783	
Ager, A. ..	60	4,668
Geraldine:		
Flatman, F. R.	2,275	
Maslin, W. S.	1,303	3,578
Timaru:		
Hall-Jones, W.	3,046	
Smith, F. H.	1,395	
Isitt, F. W.	348	4,789
Waitaki:		
Steward, Sir W. J.	1,992	
Campbell, J.	1,400	3,392
Oamaru:		
Duncan, T. Y.	2,141	
Brown, J. M.	1,261	
Macpherson, J. A.	717	
Crawford, H. B.	138	4,257
Mount Ida:		
Herdman, A. L.	1,731	
Ewing, J. ..	1,600	3,331
Waikouaiti:		
Mackenzie, T.	2,424	
Isitt, F. W.	578	3,002

Electoral Districts and Names of Candidates	Number of Votes recorded. For each Candidate	Total.
Chalmers:		
Allen, E. G...	2,614	
White, J. ..	2,002	4,616
City of Dunedin:		
Bedford, H. D.	10,088	
Millar, J. A.	9,396	
Arnold, J. F.	8,393	
Barclay, A. R.	7,072	
Chisholm, R.	4,618	39,567
Caversham:		
Sidey, T. K.	2,939	
Earnshaw, W.	2,495	5,434
Taieri:		
Reid, D., jun.	1,503	
Ramsay, J. J.	1,149	
Marshall, A.	589	
Samson, C. ..	407	
Wright, J. ..	134	3,782
Bruce:		
Allen, J. ..	2,505	
Scott, J. A.	1,392	3,897
Tuapeka:		
Bennet, J. ..	1,864	
Gilkison, R...	1,798	3,662
Clutha:		
Thomson, J. W.	1,671	
Stewart, D.	1,031	
Quin, W. ..	820	
McNeil, J. ..	176	3,698
Wakatipu:		
Fraser, W. ..	1,971	
Ross, R. B.	1,522	
Murdoch, A.	324	
Kelly, J. ..	65	3,882
Mataura:		
McNab, R. ..	2,669	
Raymond, I. W.	2,231	4,900
Awarua:		
Ward, Sir J. G.	2,795	
Whyte, D. ..	913	3,708
Invercargill:		
Hanan, J. A.	3,322	
Whyte, D. ..	1,814	5,136
Wallace:		
Thomson, J. C.	2,589	
Glifedder, M.	1,796	4,385

A summary of the population, number of electors on the rolls, and the total number of votes recorded at each of the last four general elections is next given :—

—	1902.	1899.	1896.	1893.
Number of votes recorded for members elected	235,083	202,324	184,929	153,663
Number of votes recorded for defeated candidates	181,879	185,305	174,475	149,413
Total votes recorded* ..	416,962	387,629	359,404	303,076
Number of names on rolls in districts uncontested	..	13,726	..	10,539
Number of names on rolls in districts where elections were contested	415,789	360,018	339,230	292,458
Total number of electors on rolls	415,789	373,744	339,230	302,997
Total population at last census	772,504	703,119	703,119	626,359

* Total number of electors who recorded their votes: 318,859 in 1902, 279,330 in 1899, 258,254 in 1896, and 220,082 in 1893.

The names of the members returned at the last general election arranged in alphabetical order are next shown, with the electoral district represented by each.

Name.	Electoral District.
Aitken, John Guthrie Wood	City of Wellington.
Alison, Ewen William	Waitemata.
Allen, Edmund Giblett	Chalmers.
Allen, James	Bruce.
Arnold, James Frederick	City of Dunedin.
Barber, William Henry Peter	Newtown.
Baume, Frederick Ehrenfried	City of Auckland.
Bedford, Harry Dodgshun	City of Dunedin.
Bennet, James	Tuapeka.
Bollard, John	Eden.
Buchanan, Walter Clark	Wairarapa.
Buddo, David	Kaiapoi.
Carroll, Hon. James	Waiapu.
Colvin, James	Buller.
Davey, Thomas Henry	City of Christchurch.
Duncan, Hon. Thomas Young	Oamaru.
Duthie, John	City of Wellington.
Ell, Henry George	City of Christchurch.
Field, William Hughes	Otaki.
Fisher, George	City of Wellington.
Flatman, Frederick Robert	Geraldine.
Fowlds, George	Grey Lynn.
Fraser, Alfred Levavasour Durell	Napier.
Fraser, William	Wakatipu.
Graham, John	Nelson.
Guinness, Arthur Robert	Grey.

Name.	Electoral District.
Hall, Charles	Waipawa.
Hall-Jones, Hon. William	Timaru.
Hanan, Josiah Alfred	Invercargill.
Harding, Alfred Ernest	Kaipara.
Hardy, Charles Albert Creery	Selwyn.
Herdman, Alexander Laurence	Mount Ida.
Herries, William Herbert	Bay of Plenty.
Hogg, Alexander Wilson	Masterton.
Houston, Robert Morrow	Bay of Islands.
Jennings, William Thomas	Egmont.
Kidd, Alfred	City of Auckland.
Kirkbride, Matthew Middlewood	Manukau.
Lang, Frederic William	Waikato.
Laurenson, George	Lyttelton.
Lawry, Frank	Parnell.
Lethbridge, Frank Yates	Oroua.
Lewis, Charles	Courtenay.
McGowan, Hon. James	Thames
McKenzie, Roderick	Motueka.
Mackenzie, Thomas	Waikouaiti.
McLachlan, John	Ashburton.
McNab, Robert	Mataura.
Major, Charles Edwin	Hawera.
Mander, Francis	Marsden.
Massey, William Ferguson	Franklin.
Millar, John Andrew	City of Dunedin.
Mills, Hon. Charles Houghton	Wairau.
Moss, Edward George Britton	Ohinemuri.
O'Meara, John	Pahiatua.
Reid, Donald (jun.)	Taieri.
Remington, Arthur Edward	Rangitikei.
Rhodes, Robert Heaton	Ellesmere.
Russell, Sir William Russell, K.C.M.G.	Hawke's Bay.
Rutherford, Andrew William	Hurunui.
Seddon, Rt. Hon. Richard John, P.C.	Westland.
Sidey, Thomas Kay	Caversham.
Smith, Edward Metcalf	Taranaki.
Steward, Sir William Jukes, K.C.M.G.	Waitaki.
Symes, Walter	Patea.
Tanner, William Wilcox	Avon.
Taylor, Thomas Edward	City of Christchurch.
Thomson, James William	Clutha.
Thomson, John Charles	Wallace.
Vile, Job	Manawatu.
Ward, Hon. Sir Joseph George, K.C.M.G. ..	Awarua.
Wilford, Thomas Mason	Hutt
Willis, Archibald Dudingston	Wanganui.
Witheford, Joseph Howard	City of Auckland.
Witty, George	Riccarton.
Wood, William Thomas	Palmerston.

Occupations of Members of House of Representatives

The occupations of members elected in 1902 show an increase in the number of the representatives of the farmer class as com-

pared with 1899. The table also shows that farmers or runholders furnish more members than any other class of occupation. There were twenty-one of these (besides four given as "settlers") returned in 1902. There were ten barristers or solicitors, and five journalists. The number of members returned in 1902 was seventy-six, against seventy in 1896 and 1899 :—

Occupations.	1896.	1899.	1902.
Professional—			
Barrister, solicitor	5	9	10
Journalist	9	8	5
Mining advocate, interpreter, lecturer, teacher	3	4	1
Chemist	..	..	1
Domestic—			
Hotelkeeper	..	..	1
Commercial—			
Land-broker, estate agent	..	..	2
Auctioneer	1	1	2
Director of financial company	..	1	1
Native agent	..	1	1
Stationer, bookseller, draper, grocer, butcher	3	6	5
Merchant, iron merchant, timber merchant	3	2	4
Storekeeper	1	2	2
Commission agent, clerk, accountant, commercial traveller	3	2	3
Transport and Communication—			
Coach proprietor	..	..	1
Industrial—			
Tailor, shoemaker, dyer	2	2	3
Mill-owner, ship-rigger, builder, metallurgical engineer, mine-manager	4	2	2
Blacksmith	..	..	1
Printer	..	..	2
Farmer	11	13	12
Sheep-farmer, runholder, grazier, stock-owner	14	7	9
Contractor	3	3	3
Others—			
Settler, gentleman, &c.	8	7	5

For Maori Representatives.

(Polling-day, 22nd December, 1902.)

Of a Maori population amounting to 43,143 persons at the census of 1901, 14,271 voted at the general election held in December, 1902, an increase of 643 on the number who voted at the election of 1899. In 1893 the voters numbered 11,269, or 1,739 persons fewer than in 1896, when 13,008 Maoris recorded their votes, while at the general election held in December, 1899, the number of Maoris who voted was 13,628. As the Native population increased

but slightly between 1891 and 1901, it would appear that Maoris are taking more interest as to their representation in Parliament than formerly, or perhaps there is now more convenience for attending to vote, or better knowledge of political affairs. The numbers of voters for the several districts in December, 1902, were:—

Electoral Districts.	Population: Census 1901.			Number who voted.	Per Cent. of Population at all Ages.
	Males.	Females.	Totals.		
North Island—					
Northern Maori ..	5,400	4,478	9,878	2,134	21·60
Eastern Maori ..	7,465	6,510	13,975	5,265	37·67
Western Maori ..	9,054	7,994	17,048	6,266	36·76
South Island—					
Southern Maori ..	1,193	1,049	2,242	606	27·03
Totals ..	23,112	20,031	43,143	14,271	33·08

The votes recorded for each candidate were:—

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
Northern Maori Electoral District:		
Hone Heke ..	1,665	
Hamiora Mangakahia	268	
Kipa te Whatanui ..	119	
Hapeta Henare ..	74	
Eru Ihaka	8	2,134
Eastern Maori Electoral District:		
Wiremu Pere ..	2,182	
Pirimi Mataiawhea ..	1,568	
Mohi te Atahikoia ..	1,515	5,265
Western Maori Electoral District:		
Henare Kaihau ..	3,324	
Ngarangi Katitia ..	954	
Te Heuheu Tukino ..	840	
Eruera te Kahu ..	673	
Te One Tuhi ..	399	
Te Weraroa Kingi ..	76	6,266
Southern Maori Electoral District:		
Tame Parata ..	343	
Hone Tare Tikao ..	263	606
Total		14,271

On the succeeding page will be found a tabular statement giving the results of each general election since the year 1853 for purposes of European representation.

GENERAL ELECTIONS FOR EUROPEAN REPRESENTATIVES HELD FROM THE YEAR 1853.

Parliament.	Date of General Election.	Number of Names on Roll of Electors.	Number of Members returned.	Number of Members returned unopposed.	Numbers of Votes recorded (or of Voters recording Votes).	Population of the Colony at end of Year.	Average Number of		
							Persons to each Member.	Persons to each Elector.	Electors to each Member.
First	1853	[1] 5,934	37	*	*	30,000	811	5·1	160
Second ..	1855	[2] 10,324	37	*	*	37,192	1,005	3·6	279
Third	1861	13,466	53	*	*	79,711	1,504	5·9	254
Fourth ..	1866	[3] 33,338	72	*	*	190,607	2,647	5·7	463
Fifth	1871	47,275	74	*	*	248,400	3,357	5·3	639
Sixth	1875	61,755	84	*	*	375,856	4,474	6·1	735
Seventh ..	1879	82,271	84	14	43,776	463,729	5,521	5·6	979
Eighth ..	1881	120,972	91	11	69,985	500,910	5,505	4·1	1,329
Ninth	1884	137,686	91	11	74,672	564,304	6,201	4·1	1,513
Tenth	1887	175,410	91	5	111,911	603,361	6,630	3·4	1,928
Eleventh ..	1890	183,171	70	6	136,337	625,508	8,936	3·4	2,617
Twelfth ..	1893	[4]302,997	70	3	[4 5]220,082	672,265	9,604	2·2	4,328
Thirteenth ..	1896	[4]339,230	70	..	[4 5]258,254	714,162	10,202	2·1	4,853
Fourteenth ..	1899	[4]373,744	70	3	[4 5]279,330	756,505	10,807	2·0	5,339
Fifteenth ..	1902	[4]415,789	76	..	[4 5]318,859	807,929	10,631	1·9	5,471

* Information not obtainable.

[1] Including 100, the estimated number in Akaroa District, for which there is no return.
[2] Including 800, the estimated number in the electorates of Town of New Plymouth, Grey, and Bell, and Omata, for which districts there are no returns.
[3] Electors for the Electoral District of "The Otago Goldfields" not included.
[4] Men and women.
[5] Voters recording votes.

SECTION XIII.—LICENSES AND LICENSED HOUSES, ETC.

LICENSES AND LICENSED HOUSES.

DURING the year ended the 31st March, 1902, 2,492 licenses for the sale of intoxicating liquors were granted. Of these, 1,513 were publicans' and accommodation licenses, 6 New Zealand wine, 77 packet, 155 wholesale, and 741 conditional licenses. The fees paid amounted to £54,514, and formed part of the revenue of the local governing bodies of the districts in which the licenses were issued. Particulars are given in the following table:—

NUMBER OF LICENSES GRANTED DURING THE YEAR 1901–1902, AND THE AMOUNT OF FEES PAID TO LOCAL BODIES THEREFOR.

Licenses.	In Counties.	In Boroughs.	Total.
Publicans' licenses	607	690	1,297
Accommodation licenses	216	..	216
Total licensed houses	823	690	1,513
New Zealand wine licenses	..	6	6
Packet licenses	16	61	77
Wholesale licenses	11	144	155
Conditional licenses	569	172	741
Total licenses granted	1,419	1,073	2,492
Amount of license-fees paid to local bodies	£19,917	£34,597	£54,514

The average number of persons to each licensed house in counties and boroughs respectively, for 1901–1902, is next shown:—

	Number of Licensed Houses.*	Census Population.	Average Number of Persons to each Licensed House.
Counties	823	417,596	507
Boroughs	690	350,202	508
Totals	1,513	767,798†	507

In 1900–1901 the number of licensed houses in counties was 832, and those in boroughs 690, giving a total of 1,522 houses, or 9 more than in 1901–1902. The average number of persons to a licensed house increased from 502 in 1900–1901 to 507 in 1901–1902 in counties, and in boroughs the average was 508 for both years.

* *I.e.*, houses holding publicans' or accommodation licenses.
† Excluding persons on shipboard and adjacent islands.

The annual fees paid for licenses are—

	£
(1.) For a publican's license—	
(*a.*) Within the limits of a borough or town district ..	40*
(*b.*) Outside the aforesaid limits	25
(2.) For a New Zealand wine license	1
(3.) For an accommodation license, a sum to be determined by the Licensing Committee, not exceeding..	20
(4.) For a packet license—	
(*a.*) For a vessel exceeding 50 tons register	10
(*b.*) For a vessel not exceeding 50 tons register	5
(5.) For a wholesale license	20
6.) For a conditional license, according to duration of license, a sum not exceeding	30

The approximate capital value of the licensed houses in the counties was stated at £755,687, and the same for certain of the boroughs at £323,398. There was, besides, an annual value of £106,345 for other licensed houses in the boroughs, which, capitalised at 6 per cent., would represent £1,772,417. The capital value of all licensed houses would therefore be about £2,851,502.

The total number of persons engaged in or connected with the sale or manufacture of wine, spirits, beer, cordials, &c., was returned at the census of 1901 as under:—

	Males.	Females.	Persons.
Hotelkeepers	1,341	215	1,556
Relative assisting	133	631	764
Manager, clerk	104	22	126
Hotel servant, cook	1,376	2,557	3,933
Barman, barmaid	178	349	527
Manager, secretary, steward of club-house	115	27	142
Wine, spirit, merchant		3	53
Assistant	10	1	11
Clerk, storeman	55		56
Traveller	31	..	31
Cordial, &c., seller	6	..	6
Brewer, bottler, and others engaged in brewing	606	4	610
Relative assisting	8	1	9
Maltster and assistants	147	..	147
Wine manufacturer	16	..	16
Cordial, &c., maker, bottler	231	7	238
Assistant, clerk, traveller, &c.	130	2	132
Totals	4,537	3,820	8,357

* Between the hours of six in the morning and ten at night. For an eleven o'clock license an additional £5 must be paid.

Local Option Poll.

Under "The Alcoholic Liquors Sale Control Act, 1893," each electoral district constituted for the election of a member of the House of Representatives is a licensing district, and electors for the House of Representatives are also electors under the Licensing Acts.

Under the Amendment Act of 1895 the licensing poll is taken at the same time as the general election of members of the House of Representatives. The questions for the decision of the voters are,—

(1.) Whether the number of licenses existing in the district shall continue?

(2.) Whether the number shall be reduced?

(3.) Whether any licenses whatever shall be granted?

The voter may vote for one or two of these proposals, but no more.

The method of determining the result of the poll in each district by the Returning Officer is as follows:—

(1.) If the number of votes recorded in favour of the continuance of existing licenses is an absolute majority of all the voters whose votes were recorded, the proposal is deemed to be carried, and the licenses continue until the next poll, subject to certain provisions in special cases.

(2.) If the number of votes recorded in favour of a reduction in the number of licenses is an absolute majority of all the voters whose votes were recorded, the proposal is deemed to be carried, and supersedes the proposal for continuance of licenses. The Licensing Committee then reduces publicans' licenses by not less than 5 per cent. or more than 25 per cent. of the total number existing, excluding forfeitures. Provision is made that when a reduction vote is carried the licenses shall be reduced by one at least when the total number does not exceed ten, two when not over thirty, and three at least when the licenses exceed thirty.

(3.) If the number of votes recorded in favour of the proposal that no license shall be granted is not less than three-fifths of all the voters whose votes were recorded, the proposal is declared to be carried, and supersedes the proposal for reduction and for continuance, and no licenses can be granted.

(4.) If none of the proposals respecting licenses is carried by the prescribed majority the licenses continue as they are until next poll, subject to certain provisions in special cases.

The result of the poll taken on the 25th November, 1902, as made up from returns received from the officer in charge of the poll in each licensing district, is as follows:—

District.	Number of Persons on Roll.	Votes recorded for			Total Number of Persons who recorded Valid Votes.	Number of Men and Women who recorded Votes (including Informal).			Result of Poll.
		Continuance.	Reduction.	No License.		Men.	Women.	Total.	
Bay of Islands ..	4,016	1,759	567	850	2,750	1,753	1,052	2,805	Continuance carried.
Marsden	4,886	1,738	1,709	2,032	3,844	2,358	1,515	3,873	No proposal carried.
Kaipara	4,734	2,037	1,037	1,353	3,560	2,309	1,270	3,579	Continuance carried.
Waitemata ..	5,778	2,234	1,627	1,648	4,035	2,430	1,730	4,160	"
City of Auckland ..	19,976	7,345	6,683	6,524	14,594	8,267	6,849	15,116	"
Grey Lynn ..	5,419	1,829	2,197	2,175	4,107	1,956	2,196	4,152	Reduction carried.
Eden	5,102	1,754	1,693	1,638	3,537	1,918	1,776	3,694	No proposal carried.
Parnell	6,188	2,062	1,538	1,435	3,852	2,030	1,919	3,949	Continuance carried.
Manukau	5,852	2,268	1,964	1,927	4,478	2,231	1,379	4,610	"
Franklin	4,851	1,584	1,588	1,737	3,361	2,089	1,346	3,435	No proposal carried.
Thames	5,501	1,996	1,768	2,090	4,178	2,275	1,967	4,242	"
Ohinemuri	5,281	1,956	1,255	1,808	3,795	2,527	1,367	3,894	Continuance carried.
Waikato	5,236	2,506	1,387	1,587	4,165	2,548	1,732	4,280	"
Bay of Plenty ..	5,728	2,077	1,182	1,838	4,225	2,815	1,596	4,411	No proposal carried.
Waiapu	6,281	2,295	1,970	2,568	4,879	3,139	1,835	4,974	"
Hawke's Bay ..	5,580	1,636	1,157	1,417	3,133	2,096	1,165	3,261	Continuance carried.
Napier	5,483	1,749	2,080	2,006	3,854	2,161	1,899	4,060	Reduction carried.
Waipawa	5,178	1,802	1,239	1,640	3,544	2,279	1,314	3,593	Continuance carried.
Pahiatua	4,618	1,601	1,058	1,800	3,464	2,201	1,354	3,555	No proposal carried.
Masterton	5,332	1,945	1,396	1,906	3,930	2,412	1,586	2,998	"
Wairarapa	4,750	2,015	1,245	1,727	3,972	2,465	1,609	4,074	Continuance carried.
Egmont	5,004	1,862	863	1,403	3,414	2,303	1,278	3,581	"
Taranaki	5,543	2,347	1,542	2,021	4,402	2,542	2,037	4,579	"
Hawera	5,777	2,112	1,659	2,133	4,295	2,669	1,834	4,503	No proposal carried.
Patea	6,387	2,195	1,842	2,265	4,611	3,034	1,832	4,866	"
Rangitikei	5,096	1,863	707	1,342	3,371	2,457	1,114	3,571	Continuance carried.
Wanganui	6,504	2,409	1,885	2,267	4,745	2,741	2,215	4,956	"
Oroua	4,715	1,570	1,081	1,505	3,100	1,782	1,461	3,243	"
Palmerston ..	6,116	2,365	1,473	1,976	4,637	2,638	2,028	4,666	"
Manawatu	4,478	1,587	1,096	1,400	3,109	2,014	1,238	3,252	"
Otaki	3,743	1,345	955	1,062	2,464	1,559	1,017	2,576	"
Hutt	5,064	1,674	1,585	1,920	3,721	2,157	1,763	3,920	No proposal carried.
City of Wellington ..	21,218	6,749	7,325	7,496	15,175	8,669	7,312	15,981	"

Newtown* ..	6,665	1,869	2,777	2,995	4,985	2,670	2,447	5,117	No license carried.
City of Nelson ..	5,517	2,515	1,527	1,327	4,243	2,267	2,075	4,342	Continuance carried.
Motueka	4,460	1,745	595	799	2,657	1,796	907	2,703	"
Buller	5,431	2,413	1,149	1,593	4,102	2,665	1,487	4,152	"
Grey	5,511	1,746	1,399	1,524	3,393	2,297	1,154	3,451	"
Westland	4,668	2,179	835	888	3,220	2,124	1,153	3,277	"
Wairau	5,355	2,303	1,671	1,869	4,323	2,643	1,779	4,422	"
Hurunui	4,519	1,784	1,395	1,632	3,472	2,279	1,298	3,577	"
Kaiapoi	4,725	1,601	2,132	2,319	3,936	2,134	1,852	3,986	Reduction carried.
Riccarton	4,331	1,646	1,306	1,365	3,236	1,404	1,908	3,312	Continuance carried.
Avon	5,661	1,898	2,021	2,187	4,169	2,130	2,155	4,285	No proposal carried.
City of Christchurch	19,769	7,897	7,484	7,888	16,298	8,367	8,458	16,825	"
Lyttelton	4,866	1,782	1,900	2,012	3,874	1,960	1,982	3,942	"
Ellesmere	3,890	1,489	1,162	1,336	2,890	1,724	1,242	2,966	Continuance carried.
Courtenay	4,227	1,320	1,512	1,644	3,040	1,801	1,352	3,153	No proposal carried.
Selwyn	4,339	1,258	1,608	1,804	3,081	2,017	1,222	3,239	Reduction carried.
Ashburton	5,876	1,734	2,489	2,870	4,625	2,772	1,962	4,734	No license carried.
Geraldine	4,305	1 683	1,580	1,796	3,578	2,058	1,575	3,633	No proposal carried.
Timaru	5,857	2,175	2,427	2,637	4,856	2,679	2,245	4,924	"
Waitaki	4,445	1,481	1,674	1,896	3,411	2,043	1,422	3,465	"
Oamaru	5,221	1,801	2,144	2,459	4,319	2,382	2,025	4,407	"
Mount Ida	4,296	1,596	1,319	1,569	3,251	2,174	1,180	3,354	"
Waikouaiti ..	4,333	1,311	1,524	1,698	3,017	1,767	1,336	3,103	Reduction carried.
Chalmers	6,031	1,676	2,669	2,773	4,558	2,345	2,324	4,669	No license carried.
City of Dunedin ..	23,133	7,269	8,937	8,518	17,240	8,436	8,968	17,404	Reduction carried.
Caversham	6,342	2,399	2,862	2,938	5,397	2,727	2,808	5,535	"
Taieri	4,727	1,626	1,729	2,031	3,695	2,132	1,690	3,822	No proposal carried.
Bruce*	4,871	1,525	2,157	2,372	3,869	2,103	1,826	3,929	No license carried.
Tuapeka	4,699	1,628	1,642	1,841	3,587	2,307	1,384	3,691	No proposal carried.
Clutha	4,974	1,368†	..	2,245‡	3,613	2,245	1,476	3,721	Non-restoration carried.
Mataura	6,055	1,877	2,353	2,939	4,825	2,943	2,016	4,959	No license carried.
Wakatipu	4,947	2,090	1,359	1,654	3,837	2,536	1,422	3,958	Continuance carried.
Wallace	5,154	1,957	1,836	2,323	4,201	2,688	1,714	4,402	No proposal carried.
Invercargill ..	6,339	2,043	2,855	3,079	5,147	2,660	2,556	5,216	Reduction carried.
Awarua	4,835	1,499	1,858	2,208	3,713	2,195	1,580	3,775	"
Totals	415,789	148,449	132,240	151,524	309,959§	180,294	138,565	318,859	

* Election since declared void. † For restoration. ‡ For non-restoration. § Not including 8,900 informal votes.

From the foregoing table it will be seen that 148,449 votes were recorded in favour of continuing existing licenses—including one district, that of Clutha, where the vote (1,368) was for restoration of the licenses cancelled at the poll taken in 1899—132,240 for reduction, and 151,524 for no license (including 2,245 votes cast for non-restoration in the Clutha district).

In twenty-nine of the sixty-eight licensing districts the majority of the voters was in favour of continuance, in twenty-four no proposal was carried, in nine reduction, and in six no-license was carried, but in two of these latter the poll on petition was declared invalid. In twenty-four of the districts—Marsden, Grey Lynn, Franklin, Thames, Waiapu, Napier, Pahiatua, Hutt, Waitaki, Oamaru, Waikouaiti, Kaiapoi, Avon, Lyttelton, Courtenay, Selwyn, Geraldine, Timaru, Caversham, Taieri, Tuapeka, Wallace, Invercargill, and Awarua—a majority of the votes polled was for no-license, but not in sufficient number to make up the three-fifths required to carry that issue. Of the total number of persons, 318,859, including those whose votes were informal, 180,294, or 56·54 per cent., were men, and 138,565, or 43·46 per cent., were women. Compared with the polling in the year 1899, this shows a numerical increase of 19,335, or 12·01 per cent., on the part of the men, and 17,702, or 14·65 per cent., on the part of the women, clearly showing that the latter are now taking greater interest in local-option matters than they formerly did.

A comparison with 1899 of the votes recorded and the number of persons who went to the poll, with the numerical and centesimal increase in each case, is shown in the next table :—

Year.	Number of Persons on Rolls.	Votes recorded for			Number of Persons who recorded Votes (including informal).		
		Continuance.	Reduction.	No License.	Males.	Females.	Totals.
1894 ..	248,194*	73,771	25,919	84,435	74,372	47,862	122,234
1896 ..	339,230	139,580	94,555	98,312	151,235	108,663	259,898
1899 ..	373,744	142,443	107,751	118,575	160,959	120,863	281,822
1902 ..	415,789	148,449	132,240	151,524	180,294	138,565	318,859

* Many had been struck off for not voting at the general election for Parliament.

The large increases in the number of votes recorded for no-license or reduction are prominent features in the above table. It is also interesting to note the substantial increase shown in the number of persons who went to the poll, though these latter must not be accepted as absolutely correct throughout.

SECTION XIV.—MANUFACTORIES AND WORKS.

THE results of the compilation of the special returns relating to the various manufactories, works, &c., in the colony are compared with those shown for previous censuses in certain of the tabulated statements given with these remarks.

It must be observed, however, that whereas up till the time of last census the term "factory" was rather held to mean an establishment where manufacture was carried on wholesale, where machinery was employed, and where several hands worked together; in the returns for 1901 a "factory" has been interpreted to mean any concern where two or more persons work together at making articles for disposal, wholesale or retail, and without reference to machinery being used or not. Thus the return seems to be rather one showing industrial workers (and their production) where two or more are found together, than one of manufactories to supply the wholesale traders, or making for export. But the attempt has been made to approximate the census results to those of the Labour Department, according to special direction. To make the comparison with previous census figures as true as possible, the results for all the dressmaking, tailoring, shirt-making, millinery, and other establishments which were not included until 1901, have been deducted from the totals at foot of the summary table. Any roughness in the comparison caused by small concerns employing two persons only, and doing a retail business in making or repairing, having been included at the last census, but not before, cannot be avoided. And indeed it will become clear to any one reading the following remarks that the large increase in money value of manufactures is obtained mostly on items in respect of which moving down to a limit of two persons engaged would not materially alter the comparison.

The totals for the industries do not include mining and quarrying, which are dealt with separately.

Deducting, as above mentioned, from the total value of manufactures for the year 1900 the results for such industries as were not included in 1895, a most satisfactory increase is found on analysis of items, which has been mainly brought about by developments on a large scale in the following industries:—

VALUE OF OUTPUT FOR YEAR 1895 COMPARED WITH 1900.

	Increase in 5 years. £
Meat freezing, preserving, &c.	2,182,616
Butter and cheese factories	1,033,876
Tanning, fellmongering, and wool-scouring ...	650,855
Foundries, boiler-making, range-making, and engineering	621,356
Sawmills, with sash and door making ...	369,882
Printing establishments (not Government) ...	315,161
Clothing (with boot and shoe) factories ...	242,122
Breweries and malt-houses	240,468
Flaxmills	170,946
Gasworks	91,542
Chaff-cutting works	90,816
Biscuit factories	79,010
Bacon-curing establishments	73,542
Coach-building and painting	67,108
Woollen-mills	56,959
Brick, tile, and pottery works	56,090
Aerated-water factories	53,202
Cycle factories	46,230
Lime and cement works	29,261

If to these be added the value of the grass-seed after dressing, £241,239 for the year 1900, the greater part of the increase in the total for all manufactured articles (£7,591,789) is accounted for. There are a large number of smaller amounts of increase than those above stated, but the main lines of development are sufficiently indicated.

The addition of the figures in the column for total value of manufactures is not absolutely justified to the fullest extent of the amount shown (seventeen million pounds sterling); but in the present state of New Zealand industries it appears that the degree of repetition of value is not so great as to prevent the total given being of great help in judging of development. No doubt seventeen million pounds is over the fact, because, for instance, butter frozen for export is included in returns for meat freezing establishments, and also in the butter factory returns; timber cut is valued under saw-milling, and some again in the furniture-making line. Also, leather is valued in the tanning returns, and some part of it again in the boot and saddlery items. But, of the material operated upon, a great deal is imported.

The great primary industries of meat-freezing, butter and cheese making, with some others, do not mainly provide materials for making other wares.

The iron which is used at the foundries and engineering works is imported to New Zealand.

But it must be admitted that, as the colony advances in primary industries, deductions will have to be made with great discrimination from the figures in the column "Value of all manufactures," in respect of the amounts given in the returns.

As yet it is held that the addition is not so much affected by repetitions as to render the result other than useful; although, as before remarked, the total figures are admittedly in excess of the actual fact. The comparison with previous census results is still considered valuable.

The special tables which follow the summaries will show clearly that quantities have risen, as well as the value of manufactures, so that the development is not merely a question of market prices but of actual output.

In 1896 the actual increase in five years of the annual output was found to be only £775,523. But it was noticed that there were special causes for this amount being so small; and also that quantities showed then in many cases a certain degree of development of industries, though values had not been maintained throughout.

The year 1895 was admittedly a time when great results could not be looked for. Severe financial troubles had happened shortly before. The phormium and rope industries, iron-working (implements and other) were not thriving, and in other lines matters were not altogether what could have been wished. The inquiry for the year 1900 has been made after a period of great prosperity.

MANUFACTORIES AND WORKS, 1896 AND 1901.

	April, 1896. No.	March, 1901.† No.	Increase, 1896–1901. No.
Number of establishments* ..	2,459	3,163	704
Hands employed—			
Males	22,986	35,438	12,452
Females	4,403	6,288	1,885
Totals†	27,389	41,726	14,337
Wages paid—	£	£	£
To Males	1,776,076	2,895,279	1,119,203
" Females	131,516	203,282	71,766
Totals†	1,907,592	3,098,561	1,190,969

* Omitting Government Railway Workshops and Government Printing Office.
† Excluding dressmaking, tailoring, shirt-making, millinery, &c., for which no returns in 1896.

MANUFACTORIES AND WORKS, 1896 AND 1901—*continued.*

	April, 1896.	March, 1901.	Increase 1896-1901.
	H.-p.	H.-p.	H.-p.
Horse-power	28,096	39,052	10,956
	£	£	£
Total approximate value of—			
Land	1,063,989	1,713,254	649,265
Buildings	1,743,073	2,419,803	676,730
Machinery and plant	2,988,955	3,826,574	837,619
Totals	5,796,017	7,959,631	2,163,614

Under the heading "Hands employed," the males increased from 22,986 in 1896 to 35,438, or at the rate of nearly 54·17 per cent. in five years. The females employed increased at the rate of 42·81 per cent.

The wages paid in the factories or large industrial works dealt with in the census returns were returned for 1895 at £1,907,592, and for 1900 £3,098,561.

The average annual amount of wages paid to male hands was £77·2 in 1895 and £81·7 in 1900. For females, £29·8 in 1895 against £32·3 at the last census. The wages of both would seem to have been more than maintained.

The increase for the year 1901 over 1896 in the horse-power stated in the returns was 10,956, against 6,400 for 1896.

The approximate value of the land used for purposes of the factories and industries increased from £1,063,989 in 1896 to £1,713,254 in 1901. The value of the lands used for mining is not included in the above figures, and the value of Crown lands has been omitted throughout.

A very satisfactory development will be found in the value of the machinery and plant, from £2,988,955 in 1896 to £3,826,574 in 1901, being at the rate of 28·02 per cent. for the period. The value of the buildings also increased greatly.

INDUSTRIES IN PROVINCIAL DISTRICTS.

All the various industries for which returns were received in 1901 are given in the statement below, which thus enumerates completely the manufactories and works in operation in the colony, specifying the provincial districts in which they are situated:—

INDUSTRIES IN PROVINCIAL DISTRICTS.

Manufactories, Works, &c.	Number of Industries in Provincial Districts.									Total Number of Industries.
	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland.	Canterbury.	Otago.	
Animal food—										
Meat freezing and preserving works	7	2	2	5	1	..	..	4	13	34
Ham- and bacon-curing establishments	4	4	2	3	..	4	..	10	12	39
Fish curing and preserving works	8	..	..	4	1	1	1	..	13	28
Butter and cheese factories	27	102	8	37	4	7	3	17	42	247
Rabbit-packing	..	..	..	..	..	..	..	..	7	7
Condensed-milk factory	..	..	..	..	..	..	..	..	1	1
Vegetable food—										
Grain-mills	8	3	2	8	2	5	..	23	27	78
Biscuit-factories	5	..	1	3	1	1	..	2	7	20
Fruit-preserving and jam-making works	6	1	1	1	..	1	..	1	2	13
Sugar-boiling and confectionery works	8	..	3	4	..	..	..	7	4	26
Sugar-refining works	1	..	..	..	..	..	..	..	..	1
Fruit-canning works	1	..	..	..	..	..	..	..	..	1
Baking-powder factories	8	..	..	1	..	..	..	1	1	11
Drinks, narcotics, and stimulants—										
Breweries	9	3	5	10	2	10	4	16	15	74
Malthouses	4	..	1	3	2	4	1	10	8	33
Colonial-wine making	4	..	3	1	1	2	1	2	..	14
Aerated-water factories	22	11	8	24	5	7	4	27	17	125
Coffee and spice works	4	..	..	4	..	1	1	3	5	18
Tobacco manufactories	2	..	..	..	..	..	..	..	..	2
Cigarette manufactories	1	..	..	1	..	..	..	..	1	3
Sauce and pickle factories	9	1	1	5	..	1	..	4	2	23
Vinegar works	3	..	..	..	..	1	..	..	..	4
Ice factories	2	..	..	..	..	..	..	..	..	2
Animal matters (not otherwise classed)—										
Bone-mills	2	3	..	2	..	..	1	..	..	8
Soap and candle works	7	..	1	4	..	2	..	6	4	24
Glue factory	1	..	..	..	..	..	..	..	..	1
Sausage-skin factory	1	..	1	3	..	..	..	4	1	10
Boiling-down works	5	..	1	3	..	..	..	..	5	14
Manure-works	1	..	2	..	..	..	..	1	1	5
Oleomargarine-works	..	..	..	..	..	..	..	1	..	1
Fat-refining works	..	..	..	..	..	..	..	1	..	1
Working in wood—										
Cooperages	4	2	2	4	..	..	..	7	4	23
Saw-mills, sash and door factories	48	23	26	66	8	46	29	18	70	334
Barrow and ladder factory	1	..	..	..	..	..	..	..	..	1
Woodware and turnery factories	10	1	..	5	..	..	..	6	6	28

INDUSTRIES IN PROVINCIAL DISTRICTS—*continued.*

Manufactories, Works, &c.	Number of Industries in Provincial Districts.									Total Number of Industries.
	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland.	Canterbury.	Otago.	
Vegetable produce for fodder—										
Chaff-cutting establishments	15	2	..	..	..	12	..	25	1	55
Grass-seed-dressing establishments	..	4	1	..	..	..	..	9	11	25
Paper-manufacture—										
Paper-mills	1	..	..	..	..	..	..	..	2	3
Paper bag and box factories..	3	..	..	..	..	..	..	1	3	7
Gas-works	6	2	2	6	1	2	2	4	5	30
Electric-lighting works ..	..	1	..	1	..	1	..	1	2	6
Processes relating to stone, clay, glass, &c.—										
Lime and cement works ..	6	..	..	1	..	2	1	..	5	15
Brick, tile, and pottery works	24	5	8	18	1	5	2	20	25	108
Tobacco-pipe factory ..	..	..	..	..	..	..	..	..	1	1
Monumental masonry ..	8	..	1	3	..	2	..	6	7	27
Glassworks	1	..	..	..	..	..	..	1	..	2
Glass-bevelling works ..	1	..	..	1	..	..	..	..	..	2
Electro-plating works ..	1	..	..	..	..	..	..	1	..	2
Pumice-works	1	..	..	..	..	..	..	..	..	1
Metals, other than gold and silver—										
Tinware-factories	12	..	..	13	..	4	2	18	11	60
Iron and brass foundries, boiler-making, machinists, &c.	13	1	2	13	2	3	3	14	14	65
Heel- and toe-plate factories	2	..	..	..	..	..	..	..	1	3
Engineering-works	10	..	..	9	..	2	..	8	8	37
Range-making works ..	5	..	..	1	..	..	..	..	3	9
Spouting and ridging factories	6	8	2	3	..	..	..	7	9	35
Lead-headed-nail works ..	..	..	..	1	..	..	..	..	..	1
Iron-pipe and fluming works..	..	..	..	..	..	..	..	..	2	2
Books and publications—										
Printing offices	35	12	4	40	2	8	3	35	49	188
Musical instruments—										
Musical-instrument factories	..	..	..	1	..	..	..	..	2	3
Ornaments, minor art products, and small wares—										
Picture-frame makers ..	2	..	..	4	..	..	..	..	3	9
Basket and perambulator factories	6	..	..	6	..	..	..	4	5	21
Cork-cutting	1	..	..	..	..	..	..	..	..	1
Lapidaries	..	..	..	..	..	..	..	..	3	3
Equipment for sports and games—										
Billiard-table factories ..	1	..	..	1	..	..	..	1	..	3
Designs, medals, type, and dies—										
Rubber-stamp making ..	2	..	..	..	..	..	..	..	..	2
Arms and explosives—										
Ammunition factory ..	1	..	..	..	..	..	..	..	..	1

INDUSTRIES IN PROVINCIAL DISTRICTS—*continued.*

Manufactories, Works, &c.	Number of Industries in Provincial Districts.									Total Number of Industries.
	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland.	Canterbury.	Otago.	
Machines, tools, and implements—										
Agricultural-implement factories	6	..	2	3	..	..	..	10	12	33
Brush and broom factories ..	6	..	..	1	..	..	..	3	2	12
Cutlery factory	1	..	..	..	..	..	..	..	..	1
Bellows factory	1	..	..	..	..	..	..	..	..	1
Carriages and vehicles—										
Coach building and painting works	33	11	12	44	4	9	1	26	20	160
Cycle factories	8	2	3	10	..	2	..	25	21	71
Harness, saddlery, and leatherware—										
Saddlery and harness factories	22	7	7	29	..	5	1	24	20	115
Whip-thong factories ..	..	..	..	1	..	..	..	..	1	2
Portmanteau factories ..	2	..	..	2	..	..	..	..	2	6
Tanning, fellmongering, and wool-scouring establishments	16	4	15	14	4	4	..	29	33	119
Ships, boats, and their equipment—										
Ship- and boat-building yards	17	..	..	3	..	1	..	2	9	32
Graving-docks and patent slips	3	..	..	1	..	..	..	2	1	7
Block and pump factory ..	1	..	..	..	..	..	..	..	..	1
Sail and oilskin factories ..	9	1	2	4	..	1	1	5	7	30
Furniture—										
Furniture and cabinetmaking	26	14	7	36	1	4	4	20	32	144
Venetian-blind works ..	2	..	..	5	..	..	..	2	3	12
Mattress factories	3	..	..	3	..	..	..	2	4	12
Wool, rug, and mat making..	..	..	..	..	..	..	..	..	2	2
Chemicals and by-products—										
Perfumery manufactory ..	1	..	..	..	..	..	..	..	..	1
Varnish manufactories ..	3	..	..	..	..	..	..	..	1	4
Ink manufactories	2	..	..	..	..	..	..	..	1	3
Starch manufactories ..	..	..	..	..	..	1	..	..	2	3
Chemical works	2	..	..	..	..	..	..	1	5	8
Hæmatite-paint factories ..	..	..	..	..	..	1	..	..	3	4
Sheep-dip factories.. ..	..	..	2	..	..	..	..	..	1	3
Match factories	..	..	..	1	..	..	..	..	1	2
Herbal-remedies factories ..	1	..	..	4	..	..	..	..	3	8
Blacking factories	1	..	..	1	..	..	..	..	1	3
Coccanut-oil mill	2	..	..	..	..	..	..	..	..	2
Textile fabrics—										
Woollen-mills	1	..	..	1	..	..	..	3	5	10
Flock-mills	1	..	..	1	..	..	..	1	2	5
Cleaning and dyeing works ..	5	..	..	2	..	..	..	3	1	11
Dress—										
Tailoring establishments ..	32	12	3	67	..	10	7	22	22	175
Dressmaking and millinery establishments	41	8	12	78	5	9	3	69	65	290

INDUSTRIES IN PROVINCIAL DISTRICTS.—*continued.*

Manufactories, Works, &c.	Number of Industries in Provincial Districts.									Total Number of Industries.
	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland.	Canterbury.	Otago.	
Dress—*continued.*										
Shirt-making establishments	4	1	..	7	..	1	..	4	8	25
Corset and belt manufactories	3	..	..	..	..	..	..	3	..	6
Clothing factories	7	..	..	3	..	..	..	3	8	21
Waterproof factories ..	1	..	..	2	..	..	..	1	2	6
Boot and shoe factories ..	31	4	..	24	..	2	3	27	35	126
Hat and cap factories ..	5	..	..	3	..	..	..	2	3	13
Hosiery factories	1	..	..	3	..	1	..	5	7	17
Fibrous materials—										
Rope and twine works ..	3	1	..	2	..	..	..	7	4	17
Bag and sack factory ..	..	..	..	..	..	..	..	..	1	1
Flax-mills	23	6	2	25	14	7	..	8	16	101
Returns not included in above..	40	5	3	4	..	6	..	13	3	74
Totals, Census, 1901 ..	752	267	160	707	61	198	78	648	809	3680
Deduct tailoring, dressmaking, shirt-making, and monumental masons' establishments, not included in accounts taken for 1896 and 1891	85	21	16	155	5	22	10	101	102	517
Totals, Census, 1901 (less deductions shown above)	667	246	144	552	56	176	68	547	707	3163
Totals, Census, 1896 ..	573	128	147	396	50	154	47	448	516	2459
Totals, Census, 1891 ..	577	68	85	333	77	142	51	380	541	2254

The provincial districts, arranged according to the number of industries belonging to each, specified in the last census returns, stand as under:—

	Number of Industries, excluding Mines and Quarries.		
	1901.	1896.	1891.
Otago	707	516	541
Auckland	667	573	577
Wellington	552	396	333
Canterbury	547	448	380
Taranaki	246	128	68
Nelson	176	154	142
Hawke's Bay	144	147	85
Westland	68	47	51
Marlborough	56	50	77

DETAILS OF THE PRINCIPAL INDUSTRIES.

The principal industries returned at the census of 1901, and particulars relating thereto, are given in detail in the following table. These industries are arranged in classes according to their nature :—

DETAILS OF THE PRINCIPAL INDUSTRIES.

Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1900.	Value of all Manufactures or Produce (including Repairs) for the Year 1900.*	Approximate Value of Land, Buildings, Machinery, and Plant.
		Males.	Females.	Total.	Males.	Females.	Total.				
					£	£	£	H.-p.	£	£	£
Animal food—											
Meat freezing and preserving works†	34	2,172	49	2,221	198,306	1,419	199,725	7,057	252,290	3,720,475	893,720
Ham and bacon curing establishments†	39	185	11	196	13,891	496	14,387	250	115,656	159,564	62,192
Fish curing and preserving works†	28	135	2	137	7,445	73	7,518	..	7,714	25,173	17,235
Butter and cheese factories†	247	1,165	23	1,188	95,461	972	96,433	2,399	1,195,600	1,535,150	388,750
Rabbit-packing ..	7	62	..	62	3,200	..	3,200	..	..	..	362
Condensed-milk factory	1	17	16	33	..	..	..	39	..	..	..
Vegetable food—											
Grain-mills†	78	513	2	515	49,254	110	49,364	2,422	545,642	682,884	358,656
Biscuit factories† ..	20	454	213	667	34,231	4,545	38,776	291	117,383	197,989	90,243
Fruit-preserving and jam-making works†	13	85	82	167	6,317	1,758	8,075	117	42,404	58,092	20,935
Sugar-boiling and confectionery works	26	158	147	305	11,128	3,600	14,728	19	47,150	88,580	56,955
Sugar-refining works ..	1	256	..	256	..	..	..	922	..	..	..
Fruit-canning works ..	1	3	2	5	..	..	..	10	..	..	..
Baking-powder factories	11	19	10	29	1,074	181	1,255	17	9,318	18,163	18,200
Drinks, narcotics, and stimulants—											
Breweries†	74	677	5	682	83,493	77	83,570	632	158,212	553,627	294,592

* For information as to quantities manufactured or produced, see special tables. Value of output, wages, &c., not shown where the number of establishments is so small that particulars might be identified.

† For full particulars respecting these industries, see special tables.

NOTE.—See note at end of Table.

Details of the Principal Industries—*continued.*

Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1900.	Value of all Manufactures or Produce (including Repairs) for the Year 1900.*	Approximate Value of Land, Buildings, Machinery, and Plant.
		Males.	Females.	Total.	Males.	Females.	Total.				
Drinks, narcotics, and stimulants—*continued.*					£	£	£	H.-p.	£	£	£
Malthouses†	33	145	..	145	14,994	..	14,994	110	72,211	105,671	75,038
Colonial-wine making† ..	14	49	10	59	2,320	92	2,412	14	3,019	10,330	18,183
Aerated-water factories†	125	437	15	452	31,771	284	32,055	250	63,835	151,811	105,178
Coffee and spice works ..	18	63	15	78	4,959	235	5,194	83	32,091	45,628	47,572
Tobacco manufactories	2	11	9	20	..	..	..	8	..	..	..
Cigarette manufactories	3	1	17	18	..	..	..	6	..	..	..
Sauce and pickle factories†	23	77	51	128	4,628	1,760	6,388	71	20,505	31,258	36,715
Vinegar works ..	4	13	10	23	1,179	258	1,437	4	3,284	6,824	4,480
Ice-factories	2	5	..	5	..	..	..	35	..	..	..
Animal matter (not otherwise classed)—											
Bone-mills	8	17	..	17	453	..	453	77	1,080	2,529	6,230
Soap and candle works†	24	224	8	232	19,009	239	19,248	346	112,623	158,649	66,809
Glue factory	1	5	..	5	..	..	..	28	..	..	..
Sausage-skin factories ..	10	98	..	98	8,689	..	8,689	..	17,845	30,674	3,949
Boiling-down works† ..	14	61	..	61	5,910	..	5,910	393	92,693	114,416	26,838
Manure works.. ..	5	30	..	30	1,872	..	1,872	63	31,652	37,769	10,266
Oleomargarine-works ..	1	9	..	9	..	..	..	50	..	..	..
Fat-refining works ..	1	14	..	14	..	..	..	18	..	..	..
Working in wood—											
Cooperages†	23	137	1	138	10,884	39	10,923	177	19,942	37,521	21,787
Saw-mills, sash and door factories†	334	6,805	7	6,812	513,622	266	513,888	8,744	..	1,268,689	703,620

Barrow and ladder factory	1	5	..	5	..	..	..	..	..	..	..
Woodware and turnery factories	28	154	2	156	11,779	82	11,861	176	19,146	37,552	28,227
Vegetable produce for fodder—											
Chaff-cutting establishments	55	265	1	266	9,829	26	9,855	391	130,507	169,313	46,786
Grass-seed dressing establishments	25	60	..	60	5,310	..	5,310	189	197,846	241,239	48,195
Paper manufacture—											
Paper-mills	3	79	19	98	..	..	..	705	..	..	..
Paper bag and box factories	7	24	57	81	1,312	1,936	3,248	13	4,471	14,217	11,499
Gasworks†	30	568	4	572	70,388	185	70,573	242	83,612	290,567	971,559
Electric-lighting works ..	6	52	..	52	6,226	..	6,226	2,158	4,603	23,234	64,156
Processes relating to stone, clay, glass, &c.—											
Lime and cement works†	15	184	..	184	16,577	..	16,577	466	18,397	45,142	38,436
Brick, tile, and pottery works†	108	838	..	838	63,336	..	63,336	659	..	122,230	114,567
Tobacco-pipe factory ..	1	2	2	4	..	..	..	..	..	..	..
Monumental masonry ..	27	81	..	81	7,072	..	7,072	13	8,689	22,313	17,391
Glassworks	2	9	..	9	..	..	..	..	..	..	..
Glass-bevelling works ..	2	7	..	7	..	..	..	13	..	..	..
Electro-plating works ..	2	11	..	11	..	..	..	7	..	..	..
Pumice-works ..	1	27	1	28	..	..	..	15	..	..	..
Metals, other than gold and silver—											
Tinware factories† ..	60	336	1	337	23,107	36	23,143	23	52,553	98,587	56,914
Iron and brass foundries, boiler-making, machinists, &c.†	65	1,950	5	1,955	162,477	170	162,647	983	240,578	508,906	211,282
Heel- and toe-plate factories	3	7	..	7	..	..	..	23	..	..	..

* For information as to quantities manufactured or produced, see special tables. Value of output, wages, &c., not shown where the number of establishments is so small that particulars might be identified. † For full particulars respecting these industries see special tables.

NOTE.—See note at end of Table.

DETAILS OF THE PRINCIPAL INDUSTRIES—*continued.*

Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1900	Value of all Manufactures or Produce (including Repairs) for the Year 1900.*	Approximate Value of Land, Buildings, Machinery, and Plant.
		Males.	Females.	Total.	Males.	Females.	Total.				
Metals other than gold and silver—*continued.*					£	£	£	H.p.	£	£	£
Engineering works†‡ ..	37	1,437	5	1,442	127,374	261	127,635	541	186,208	361,958	155,081
Range-making works ..	9	193	..	193	16,927	..	16,927	53	19,721	53,307	27,919
Spouting and ridging factories	35	261	..	261	20,584	..	20,584	35	70,643	112,691	52,687
Lead-headed-nail works	1	3	..	3	..	..	..	..	..	..	..
Iron-pipe and fluming works	2	5	..	5	..	..	..	..	..	..	..
Books and publications—											
Printing offices†§ ..	188	2,627	507	3,134	268,041	16,564	284,605	956	200,243	704,285	559,538
Musical instruments—											
Musical-instrument factories	3	11	..	11	..	..	..	..	..	..	..
Ornaments, minor art products, and smallwares—											
Picture-frame makers ..	9	19	3	22	1,234	69	1,303	1	2,497	5,771	11,750
Basket and perambulator factories	21	107	11	118	6,517	494	7,011	9	6,902	17,942	18,180
Cork-cutting	1	3	..	3	..	..	..	7	..	..	..
Lapidaries	3	8	..	8	..	..	..	..	..	..	..
Equipment for sports and games—											
Billiard-table factories ..	3	7	..	7	..	..	..	..	..	..	..
Designs, medals, type, and dies—											
Rubber-stamp making ..	2	3	..	3	..	..	..	..	..	..	..

Arms and explosives—											
Ammunition-factory ..	1	21	84	105	..	..	..	39	..	..	
Machines, tools, and implements—											
Agricultural implement factories†	33	584	2	586	53,879	62	53,941	360	49,072	138,094	61,339
Brush and broom factories	12	86	42	128	5,965	1,190	7,155	32	10,158	21,131	13,829
Cutlery-factory ..	1	2	..	2	..	..	..	2	..	..	..
Bellows-factory ..	1	2	..	2	..	..	..	..	..	..	..
Carriages and vehicles—											
Coach-building and painting works†	160	1,185	..	1,185	83,356	..	83,356	128	88,229	216,077	150,811
Cycle-factories† ..	71	378	17	395	20,873	570	21,443	95	26,824	65,047	65,403
Harness, saddlery, and leatherware—											
Saddlery and harness factories†	115	629	23	652	40,808	1,026	41,834	3	75,724	147,626	96,559
Whip-thong factories ..	2	5	..	5	..	..	..	..	..	..	..
Portmanteau factories ..	6	19	3	22	1,206	117	1,323	..	2,741	5,483	6,460
Tanning, fellmongering, and wool-scouring establishments†	119	1,957	6	1,963	159,180	162	159,342	1,108	1,391,323	1,888,107	235,952
Ships, boats, and their equipment—											
Ship- and boat-building yards†	32	211	..	211	13,476	..	13,476	49	20,389	45,811	15,198
Graving-docks and patent slips	7	32	..	32	2,864	..	2,864	435	..	7,264	230,165
Block and pump factory	1	2	..	2	..	..	..	4	..	..	..
Sail and oilskin factories†	30	150	81	231	10,446	1,996	12,442	..	24,628	44,854	40,893
Furniture—											
Furniture and cabinet-making†	144	1,243	67	1,310	88,843	2,262	91,105	369	101,595	241,024	170,338
Venetian-blind works ..	12	49	2	51	3,567	65	3,632	19	5,896	13,233	7,469
Mattress-factories ..	12	55	..	55	3,260	..	3,260	20	9,212	16,296	13,165
Wool, rug, and mat making	2	9	8	17	..	..	..	..	..	..	..

* For information as to quantities manufactured or produced, see special tables. Value of output, wages, &c., not shown where the number of establishments is so small that particulars might be identified.
† For full particulars respecting these industries, see special tables.
‡ Value of manufactures at Government Railway Workshops not included.
§ Value of manufactures at Government Printing Office not included.
NOTE.—See note at end of table.

DETAILS OF THE PRINCIPAL INDUSTRIES—*continued.*

Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1900.	Value of all Manufactures or Produce (including Repairs) for the Year 1900.*	Approximate Value of Land, Buildings, Machinery, and Plant.
		Males.	Females.	Total.	Males.	Females.	Total.				
					£	£	£	H.-p.	£	£	£
Chemicals and by-products—					..	..	..	..	..	..	..
Perfumery-manufactory	1	1	3	4	..	..	..	..	..	..	..
Varnish-manufactories..	4	19	..	19	1,474	..	1,474	37	4,227	6,732	5,765
Ink-manufactories ..	3	5	..	5	..	..	..	8	..	..	..
Starch-manufactories ..	3	24	8	32	..	..	..	16	..	..	..
Chemical-works ..	8	76	19	95	7,551	504	8,055	92	42,479	64,834	37,793
Hæmatite-paint factories	4	12	..	12	609	..	609	28	1,030	2,578	5,943
Sheep-dip factories ..	3	6	1	7	..	..	..	10	..	..	..
Match-factories ..	2	37	146	183	..	..	..	19	..	..	..
Herbal-remedies factories	8	13	10	23	1,134	581	1,715	12	3,994	18,396	10,305
Blacking-factories ..	3	2	1	3	..	..	..	7	..	..	..
Cocoanut-oil mills ..	2	10	..	10	..	..	..	54	..	..	..
Textile fabrics—											
Woollen-mills† ..	10	769	924	1,693	71,454	40,547	112,001	1,554	196,081	359,382	277,422
Flock-mills	5	9	1	10	559	12	571	55	1,459	4,105	2,650
Cleaning and dyeing works	11	28	23	51	1,816	837	2,653	13	2,141	7,855	9,635
Dress—											
Tailoring establishments	175	722	899	1,621	65,695	37,251	102,946	8	122,853	301,356	211,016
Dressmaking and millinery establishments	290	23	2,865	2,888	2,236	76,270	78,506	..	173,211	312,436	193,998
Shirt-making establishments	25	28	503	531	1,911	13,651	15,562	40	45,319	75,879	26,528
Corset and belt manufactories	6	1	24	25	9	542	551	..	959	2,249	5,659
Clothing-factories† ..	21	431	2,081	2,512	37,778	63,023	100,801	67	177,828	329,026	89,247

Dress—continued.											
Waterproof-factories† ..	6	22	92	114	1,807	2,822	4,629	3	6,285	13,378	7,845
Boot and shoe factories†	126	1,906	790	2,696	165,227	27,216	192,443	184	273,325	529,254	176,992
Hat and cap factories ..	13	37	80	117	2,641	2,748	5,389	20	11,463	25,641	19,217
Hosiery-factories† ..	17	17	265	282	1,328	6,702	8,030	71	18,032	31,265	19,997
Fibrous materials—											
Rope and twine works†..	17	192	..	192	13,136	..	13,136	494	46,378	87,863	55,309
Bag and sack factory ..	1	..	6	6	..	..	..	..	..	..	..
Flax-mills†	101	1,698	..	1,698	101,046	..	101,046	1,190	53,064	203,492	64,446
Values for industries of which less than four of any one sort were found in the returns ..	..	..	..	..	53,927	9,235	63,162	..	526,252	694,896	258,885
Returns not included in above	74	140	156	296	10,952	4,836	15,788	138	28,834	61,749	59,659
Totals, Census, 1901	3,680	36,292	10,555	46,847	2,972,193	330,454	3,302,647	39,113	7,749,770	17,853,133§	8,408,564
Deduct tailoring, dressmaking, shirtmaking, and monumental masons' establishments, not included in accounts taken for 1896 and 1891 ..	517	854	4,267	5,121	76,914	127,172	204,086	61	350,072	711,984	448,933
Totals, Census, 1901 (less deductions shown above)	3,163	35,438	6,288	41,726	2,895,279	203,282	3,098,561	39,052	7,399,698	17,141,149	7,959,631
Totals, Census, 1896	2,459	22,986	4,403	27,389	1,776,076	131,516	1,907,592	28,096	3,285,247	9,549,360	5,796,017
Totals, Census, 1891	2,254	22,664	2,969	25,663	1,705,641	102,999	1,808,640	21,696	..	8,773,837	5,261,826

* For information as to quantities manufactured or produced, see special tables. Value of output, wages, &c., not shown where the number of establishments is so small that particulars might be identified. † For full particulars respecting these industries, see special tables. § See remarks on page 242.

NOTE.—Two or more distinct industries were carried on at some establishments. In such cases particulars of power, hands, and plant employed, and wages paid, unless stated separately for each branch of industry, have been treated as belonging to the most important work.

The succeeding statement shows the most important industries in operation in 1901, ranged in order of the values of their output for 1900, and compared with the results obtained for the years 1895, 1890, and 1885:—

	Total Value of all Manufactures or Produce, including Repairs.			
	1900. £	1895. £	1890. £	1885. £
Meat-freezing and preserving and boiling-down works	3,834,891	1,652,275	1,464,659	543,878
Tanning, fellmongering, and wool-scouring	1,888,107	1,237,252	1,026,349	634,915
Butter and cheese factories	1,535,150	501,274	150,957	43,094
Sawmills, sash and door factories	1,268,689	898,807	832,959	1,177,713
Iron and brass foundries, boiler-making, machinists, &c. (not including Government Railway Workshops)	924,171	302,815	403,635	368,919
Clothing and boot-and-shoe factories	858,280	616,158	570,315	514,506
Printing establishments (not including Government Printing Office)	704,285	389,124	354,559	273,886
Grain mills	682,884	874,656	991,812	754,830
Breweries and malthouses	659,298	418,830	380,849	421,197
Woollen mills	359,382	302,423	279,175	194,311
Gasworks	290,567	199,025	178,947	194,653
Grass-seed dressing establishments	241,239	..	..	..
Furniture and cabinetmaking	241,024	85,327	131,314	162,375
Coach-building and painting works	216,077	148,969	139,660	128,346
Flax-mills	203,492	32,546	234,266	20,059
Biscuit factories	197,989	118,979	127,147	47,784
Chaff-cutting works	169,313	78,497	63,236	54,440
Bacon-curing establishments	159,564	86,022	83,435	58,799
Soap and candle works	158,649	152,298	155,714	130,745
Aërated-water factories	151,811	98,609	91,691	94,098
Saddlery and harness factories	147,626	63,735	37,347	..
Agricultural implement factories	138,094	102,054	144,472	111,823
Brick, tile, and pottery works	122,230	66,140	56,830	91,797
Spouting and ridging works	112,691	23,762	33,140	25,478
Tinware factories	98,587	63,723	14,297	8,500
Sugar-boiling and confectionery works	88,580	33,235	17,248	17,130
Rope and twine works	87,863	52,400	76,711	56,413
Cycle factories	65,047	18,817	5,655	1,301
Chemical works	64,834	75,320	41,568	34,283
Fruit-preserving and jam-making works	58,092	36,108	27,255	32,292
Ship and boat-building works	45,811	25,233	35,847	56,132
Coffee and spice works	45,628	74,339	64,024	98,234
Lime and cement works	45,142	15,881	19,416	16,928
Sail, tent, and oilskin factories	44,854	30,166	31,083	25,574
Bone-mills and other manure works	40,298	12,246	4,628	8,337
Woodware and turnery factories	37,552	18,276	9,050	..
Cooperages	37,521	19,233	11,540	11,862
Hosiery factories	31,265	9,357	5,650	6,200
Sauce and pickle works	31,258	13,417	6,407	3,145
Sausage-skin factories	30,674	13,472	10,582	..

	Total Value of all Manufactures or Produce, including Repairs.			
	1900. £	1895. £	1890. £	1885. £
Hat and cap factories	25,641	10,902	21,628	13,695
Fish-curing and preserving works	25,173	10,292	19,537	12,182
Electric-lighting works ..	23,234	..	..	..
Brush and broom factories ..	21,131	23,363	13,340	7,786
Herbal-remedies factories ..	18,396	..	..	..
Baking-powder factories ..	18,163	10,153	5,637	4,120
Basket and perambulator factories	17,942	11,920	7,381	4,375
Mattress factories	16,296	..	..	..
Paper-bag and cardboard box factories	14,217	7,698	4,497	..
Waterproof factories	13,378	22,354	..	..
Venetian blind factories ..	13,233	9,878	4,776	6,470
Colonial-wine works	10,330	8,963	3,456	3,626
Other industries in respect of which the value of the manufactures was less than £8,000, and sundry	805,606	473,037	380,156	235,148

The order of the principal industries, ranged according to the number of hands employed, is as follows:—

	Number of Hands.		
	1901.	1896.	1891.
Sawmills, sash and door factories	6,812	4,059	3,266
Clothing and boot and shoe factories	5,208	4,407	3,233
Iron and brass foundries, boiler-making, machinists, &c.	3,590	1,642	1,787
Printing establishments (excluding Government Printing Office)	3,134	2,351	2,569
Meat freezing, preserving, and boiling-down works ..	2,282	2,037	1,568
Tanning, fellmongering, and wool-scouring establishments	1,963	1,629	1,196
Flax-mills	1,698	647	3,204
Woollen-mills	1,693	1,416	1,175
Furniture and cabinet-making factories	1,310	496	585
Butter and cheese factories	1,188	576	269
Coach-building and painting works	1,185	807	678
Brick, tile, and pottery works	838	455	494
Breweries and malthouses	827	560	563
Biscuit factories	667	425	331
Saddlery and harness factories	652	266	184
Agricultural implement factories	586	581	528
Gasworks	572	295	249
Grain-mills	515	419	499
Aerated-water factories	452	347	261
Cycle factories	395	125	31
Tinware factories	337	289	93
Sugar-boiling and confectionery works	305	69	53
Hosiery factories	282	133	51
Chaff-cutting works	266	212	205

	Number of Hands.		
	1901.	1896.	1891.
Spouting and ridging works	261	90	100
Sugar-refining works	256	160	110
Soap and candle works	232	190	209
Sail, tent, and oilskin factories	231	143	124
Ship- and boat-building yards	211	108	145
Bacon-curing establishments	196	123	84
Rope and twine works	192	150	222
Lime and cement works	184	79	98
Match factories	183	121	..
Fruit-preserving and jam-making works	167	193	117
Woodware and turnery factories	156	81	51
Cooperages	138	76	53
Fish-curing and preserving works	137	75	140
Brush and broom factories	128	92	81
Sauce and pickle works	128	68	41
Basket and perambulator factories	118	76	63
Hat and cap factories	117	72	112
Waterproof factories	114	93	..
Ammunition factories	105	90	80
Sausage-skin factories	98	56	73
Paper-mills	98	84	48
Chemical works	95	114	55
Paper-bag and cardboard-box factories	81	86	35
Coffee and spice works	78	119	81
Rabbit preserving and packing works	62	32	..
Grass-seed dressing establishments	60	..	..
Colonial-wine works	59	53	24
Mattress factories	55	..	..
Electric-lighting works	52	..	..
Venetian-blind factories	51	45	29
Cleaning and dyeing works	51	58	48
Bone-mills and other manure works	47	46	25
Condensed-milk factory	33	..	..
Graving docks and patent slips	32	29	64
Starch and soda works	32	27	13
Baking-powder factories	29	..	..
Pumice works	28	20	..
Corset and belt manufactories	25	..	..
Herbal-remedies factories	23	..	..
Vinegar works	23	..	..
Portmanteau factories	22	..	..
Picture-frame makers	22	..	..
Tobacco manufactories	20	..	..
Sheep-dip factories	7	29	..
Industries employing under 20 hands	532	268	36

Meat Freezing and Preserving, with Boiling-down.

The establishments increased from 43 in 1896 to 48 in 1901, and the hands employed from 2,037 to 2,282. The value of output for 1900 is returned as more than double that for 1895, the figures being £3,834,891 against £1,652,275, a rise of £2,182,616. From 1890 to

1895 the increase was only £187,616. Of the total value for 1900 (£3,834,891), sheep and lambs frozen were valued at £2,103,166, and legs of mutton at £85,361. The beef frozen, preserved meats, tallow, bonedust, &c., also show largely increased business in the quinquennium, 1895–1900; frozen butter and rabbits most markedly so.

The table given below shows quantities as well as values in the comparisons, which speak for themselves as to the great development that has been proceeding of late.

Census Year.	No of Works.	Hands employed.		Wages paid.		Machine-power used.			Amount of Horse-power.	Output, 1900 and 1895. Sheep and Lambs frozen.	
		M.	F.	M.	F.	Steam.	Water.	Oil.		Carcases.	Value.
				£	£					No.	£
1901 ..	48	2,233	49	204,216	1,419	50	..	1	7,450	*3,348,123	*2,103,166
1896 ..	43	1,985	52	180,471	304	42	3	..	7,492	*2,362,535	*1,213,559
Increase ..	5	248	..	23,745	1,115	8	..	1	..	985,588	889,607
Decrease ..	..	..	3	..	..	..	3	..	42	..	..

Census Year.	Output for the Years 1900 and 1895—*continued.* Beef frozen and chilled.		Frozen Rabbits.		Preserved Meats.		Tallow.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quan.	Value.
	Lb.	£	No.	£	Lb.	£	Tons.	£
1901 ..	34,285,328	381,210	6,040,047	144,616	7,867,440	171,151	14,767	298,821
1896 ..	1,954,495	21,425	..	..	4,999,640	74,369	10,958	172,310
Incr.	32,330,833	359,785	6,040,047	144,616	2,867,800	96,782	3,809	126,511

Census Year.	Output for the Years 1900 and 1895—*continued.* Bonedust.		Other Manures.		Neatsfoot and Trotter Oil.		Bones, Horns, Hoofs, &c.	
	Quan.	Value.	Quan.	Value.	Quan.	Value.	Quan.	Value.
	Tons.	£	Tons.	£	Galls.	£	Tons.	£
1901 ..	6,514	31,037	5,721	25,824	30,174	3,450	530	3,085
1896 ..	3,248	11,865	2,206	9,424	15,067	2,097	113	188
Increase ..	3,266	19,172	3,515	16,400	15,107	1,353	417	2,897

* Also 21,994 cwt. of legs of mutton frozen in 1895, valued at £16,373, and 64,203 cwt. of frozen legs of mutton in 1900, valued at £85,361.

Census Year.	Output, 1900 and 1895—*continued.*			Approximate Value of		
	Other Products. Value.	Frozen Produce (Butter and all other frozen): Value.	Total Value of Output, 1900 and 1895.	Land.	Buildings.	Machinery and Plant.
	£	£	£	£	£	£
1901 ..	82,345	503,430	3,834,891	87,776	428,075	404,707
1896 ..	64,889	65,776	1,652,275	67,504	326,224	317,323
Increase ..	17,456	437,654	2,182,616	20,272	101,851	87,384

Bacon-curing Establishments.

These were 39 in number, employing 196 hands, against 37 with 123 hands in 1895. The output increased in value from £86,022 for 1895 to £159,564 in 1900, the business done in hams having progressed very greatly.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Motive Power.			Horse-power.
		M.	F.	M.	F.	Steam.	Water.	Gas.	
				£	£				H.-p.
1901	39	185	11	13,891	496	17	2	2	250
1896	37	118	5	7,314	80	7	1	..	49
Increase ..	2	67	6	6,577	416	10	1	2	201

Census Year.	Value of Material used.	Output for Year 1900.				Total Value of Output.	Approximate Value of *†		
		Bacon.	Hams.	Lard.	Other Products.		Land.	Buildings.	Machinery and Plant.
	£	Cwt.	Cwt.	Cwt.	£	£	£	£	£
1901*.	115,656	34,103	21,836	2,082	4,182	159,564	19,377	25,960	16,855
1896 ..	65,867	33,260	800	20	..	86,022	6,823	11,090	4,605
Incr.	49,789	843	21,036	2,062	4,182	73,542	12,554	14,870	12,250

* Value of land and buildings given with butter-factory in one case. † Value of land buildings, and plant not stated in one case.

Fish Curing and Preserving.

There was a considerable decrease shown in the quantity of fish cured in 1900 as compared with 1895, but the value of the lesser output was set down as £4,778 more than in the earlier year. The quantity cured in 1900 was 1,082,820 lb., against 1,719,512 lb. in 1895. The output of tinned fish increased from 113,304 lb. to 288,849 lb., and the total value of all products of the 28 establishments rose from £10,292 to £25,173.

Census Year.	Number of Works.	Hands employed, M.	Hands employed, F.	Wages paid. M.	Wages paid. F.	Value of Materials used 1900 and 1895.
				£	£	£
1901	28	135	2	7,445	73	7,714
1896	27	74	1	3,229	13	2,124
Increase ..	1	61	1	4,216	60	5,590

Census Year.	Fish cured. Quantity.	Fish cured. Value.	Fish tinned. Quantity.	Fish tinned. Value.	Value of other Produce.	Total Value of Output.	Approximate value of Land.	Approximate value of Buildings.	Approximate value of Machinery and Plant.
	lb	£	lb	£	£	£	£	£	£
1901 ..	1,082,820	13,182	288,849	6,206	5,785	25,173	9,937	3,858	3,440
1896 ..	1,719,512	8,404	113,304	1,888	..	10,292	3,902	3,782	2,045
Incr.	..	4,778	175,545	4,318	5,785	14,881	6,035	76	1,395
Decr.	636,692	..	..	..	..	..	..	..	..

Butter and Cheese Factories.

Here a most excellent result is shown by the comparison. Not only did the number of factories increase from 170 to 247 between 1896 and 1901, besides skimming stations and creameries in connection with them—202 against 105; but the number of persons employed was more than doubled (1,188 against 576), and the value of the output rose to three times the amount for 1895. The figures are, £1,535,150 for 1900, against £501,274 for 1895.

The produce of factory-made butter for 1900 was set down at 29,758,310 lb., and for 1895 at 11,336,776 lb., while cheese made similarly increased from 86,460 cwt. to 139,687 cwt. in the same period.

It is to be regretted that there is no estimate of butter and cheese made on farms, so that the total produce for the colony could be arrived at.

By far the greater number of factories for making butter are in the North Island, the number having been 174, out of a total of 247, which turned out 24,500,000 lb. of butter in the year 1900, leaving somewhat over 5,000,000 lb. as the output for the Middle Island. Taranaki is the provincial district in which the operations are by far the largest, 12,500,000 lb. of butter being the result of the factory operations, and nearly 32,000 cwt. of cheese. Wellington factories show for 1900 a total of over 7,500,000 lb. of butter and 32,000 cwt. of cheese. Otago makes more cheese (52,000 cwt.) in her factories than any other district. The butter was found to be a little short of 3,000,000 lb. for the year.

The money invested for purposes of this industry in land, buildings, machinery, and plant has largely increased. Full particulars are given in the subjoined table:—

Census Year.	No. of Factories.	Hands Employed. M.	Hands Employed. F.	Amount paid in Wages. M.	Amount paid in Wages. F.	Machine-power used. Steam	Water.	Gas and Oil.	Horse.	Hand.	Amount of Horse-power.
				£	£						H.-p.
1901 ..	247	1,165	23	95,461	972	223	37	8	1	2	2,399
1896 ..	170	548	28	39,716	441	234	33	1	3	7	1,531
Increase	77	617	..	55,745	531	..	4	7	..	..	868
Decrease	..	..	5	..	..	11	..	..	2	5	..

Census Year.	Produce for the Years 1900 and 1895. Cheese. Quan.	Cheese. Value.	Butter. Quantity.	Butter. Value.	Other Produce. Value.	Total Value of all Produce.	Approximate Value of Land.	Buildings.	Machinery and Plant.
	Tons.	£	Lb.	£	£	£	£	£	£
1901	6,984	303,758	29,758,310	1,203,520	27,872	1,535,150	38,780	147,307	202,663
1896	4,323	146,158	11,336,776	355,116	..	501,274	27,335	91,601	115,070
Incr.	2,661	157,600	18,421,534	848,404	27,872	1,033,876	11,445	55,706	87,593

GRAIN-MILLS.

In 1896 it was remarked in the Census report that the result of a five year's comparison was to show a decrease in the number of grain-mills in operation, and decline of hands employed, also in grain operated upon. The result for 1900 is more satisfactory.

Although the number of mills working fell from 90 in 1896 to 78 in 1900, the hands employed increased from 419 to 515, and the wheat used from 3,815,433 bushels to 4,004,789 bushels, besides a slight increase in other kinds of grain. The total value of the output, however, declined from £874,656 to £682,884. A statement is given, to exhibit full details:—

Census Year.	Number of Mills.	Number of Hands employed. M.	Number of Hands employed. F.	Wages paid. M.	Wages paid. F.	Machine-power used. Steam.	Water.	Wind.	Gas.	Amount of Horse-power.	Number of Pairs of Stones.	Number of Sets of Rollers.
				£	£					H.-p.		
1901 ..	78	513	2	49,254	110	45	35	..	3	2,422	83	429
1896 ..	90	419	..	40,890	..	51	45	1	1	2,333	144	406
Increase	..	94	2	8,364	110	..	..	..	2	89	..	23
Decrease	12	..	..	..	..	6	10	1	..	..	61	..

Census Year.	Grain operated upon during the Years 1900 and 1895.			Produce for the Years 1900 and 1895.			Approximate Value of		
	Wheat.	Other Grain.	Value.	Flour.	Meal.	Value.	Land.	Buildings.	Machinery and Plant.
	Bushels.	Bushels.	£	Tons.	Tons.	£	£	£	£
1901 ..	4,004,789	762,340	545,642	83,017	7,418	682,884	44,688	132,817	181,151
1896 ..	3,815,433	731,448	653,219	81,033	16,482	874,656	41,730	134,714	179,403
Incr.	189,356	30,892	..	1,984	..	..	2,958	..	1,748
Decr.	..	..	107,577	..	9,064	191,772	..	1,897	..

Biscuit Factories.

Twenty factories are shown as in operation in 1901 against 17 five years previously. But 109 more males and 133 more females were employed in the later year. The comparison shows that not much more was done in biscuit-making during the year 1900 than in 1895, the figures being 3,267 tons against 3,003 tons. But the returns for 1900 shows also confectionery made valued at £55,039, and other products to the value of £38,474. The total output came to £197,989, while in 1895 the sum was only £118,979.

Census Year.	Number of Works.	Hands.		Wages.		Machine-power used.		Horse-power.
		M.	F.	M.	F.	Steam.	Water and Gas.	
				£	£			H.-p.
1901 ..	20	454	213	34,231	4,545	11	5	291
1896 ..	17	345	80	18,801	1,355	10	4	134
Increase ..	3	109	133	15,430	3,190	1	1	157

Census Year.	Biscuits made.	Total Value of Manufactures for 1900 and 1895.	Approximate Value of		
			Land.	Buildings.	Machinery and Plant.
	Tons.	£	£	£	£
1901 ..	3,267	197,989*	14,940	35,567	39,736
1896 ..	3,003	118,979	11,340	21,575	25,951
Increase ..	264	79,010	3,600	13,992	13,785

* Including 1,286 tons confectionery, valued at £55,039, and other products valued at £38,474.

Fruit-preserving and Jam-making.

The weight of fruit bottled or preserved in New Zealand during 1900 was returned at 84,500 lb, against 72,790 lb. in 1895. The jam manufacture increased considerably, the figures being 3,303,395 lb.,

and 1,930,058 lb. for 1895. Other preserves were also made in 1900 to the extent of 179,532 lb. How it arises that the returns show fewer hands and factories at the time of last census than at the previous collection cannot be explained.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.		Amount of Horse-power.	Value of Materials used, 1900 and 1895.
		M.	F.	M.	F.	Steam.	Gas.		
				£	£			H.-p.	£
1901 ..	13	85	82	6,317	1,758	9	2	117	42,404
1896 ..	22	103	90	5,101	1,450	6	..	77	20,542
Increase ..	..	..	..	1,216	308	3	2	40	21,862
Decrease ..	9	18	8	..	..	..	..	..	..

Census Year.	Manufactures, 1900 and 1895.				Other Preserves.		Value of all Manufactures, 1900 and 1895.	Approximate Value of		
	Fruit, bottled or preserved.		Jam made.							
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.		Land.	Buildings.	Machinery and Plant.
	Lb.	£	Lb.	£	Lb.	£	£	£	£	£
1901 ..	84,500	950	3,303,395	54,120	179,532	3,022	58,092	5,160	9,835	5,940
1896 ..	72,790	1,676	1,930,058	33,355	52,118	1,077	36,108	4,504	9,865	4,498
Incr.	11,710	..	2,373,337	20,765	127,414	1,945	21,984	656	..	1,442
Decr.	..	726	..	..	..	..	..	..	30	..

Confectionery Works.

This industry is becoming an important one. The value of the manufactured articles for the year 1900 reached the sum of £88,580, which is £55,345 in excess of the value returned for 1895. The number of establishments was 26, and the hands employed show an increase from 69 to 305, of whom 147 were females.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Motive-power.		Horse-power.	Value of Materials used in 1900 and 1895.
		M.	F.	M.	F.	Steam.	Gas.		
				£	£			H.p.	£
1901 ..	26	158	147	11,128	3,600	1	2	19	47,150
1896 ..	12	39	30	2,253	561	*	*	21	14,887
Incr.	14	119	117	8,875	3,039	..	..	..	32,263
Decr.	..	..	..	..	..	..	..	2	..

* Information not available.

Census Year.	Sugar used.		Other Materials used.	Total Value of Output for 1900 and 1895.	Approximate Value of		
	Quantity.	Value.	Value.		Land.	Buildings.	Machinery and Plant.
	Tons.	£	£	£	£	£	£
1901 ..	1,400	28,440	18,710	88,580	21,271	17,709	17,975
1896 ..	*	*	*	33,235	2,610	3,850	2,465
Increase	..	..	..	55,345	18,661	13,859	15,510

* Information not available.

BREWERIES.

Although the number of breweries in the colony in 1901 was fewer than that for 1896, the hands employed were more numerous, and the quantity of beer manufactured considerably greater.

While in the year 1895 there were 5,249,278 gallons brewed, the output for 1900 amounted to 7,379,581 gallons, being over two millions of gallons of increase in a five-year period; and the value increased proportionately.

The quantities of beer on which excise duty was paid for consumption were, for 1895, 4,936,400 gallons, and 6,811,280 gallons for 1900, being in each case a somewhat lesser quantity than that returned as manufactured.

It was noticed in the report on the Census of 1896 that consumption of beer per head of population had fallen since 1891 from 7·899 gallons in 1890 to 7·421 gallons in 1895, and the quantity manufactured showed very little increase. But from 1895 to 1900, as shown above, the brewing proceeded at a considerable rate, and the consumption per head has advanced from 7·421 gallons to 9·150 gallons. No doubt prosperous times have brought about this result.

The imported beer entered at the Customs for home consumption decreased in quantity from 201,770 gallons in 1895 to 175,620 gallons in 1900, proving that the colonial-made article is more and more taking the place of the beer brought from abroad. In the year 1892 261,394 gallons were brought into New Zealand.

Census Year.	No. of Breweries.	Hands.		Wages paid.		Motive-power employed.					
		M.	F.	M.	F.	Steam.	Water.	Gas.	Wind.	Horse.	Hand.
				£	£						
1901 ..	74	677	5	83,493	77	56	6	6	1	3	3
1896 ..	85	465	..	57,327	..	56	6	4	2	5	14
Increase ..	..	212	5	26,166	77	..	..	2	..	..	..
Decrease ..	11	..	..	..	..	..	..	..	1	2	11

Census Year.	Amount of Horse-power.	Number of		Materials used during Years 1900 and 1895.			
		Horses employed.	Drays employed.	Sugar.	Malt.	Hops.	Value.
				Lb.	Bush.	Lb.	£
1901 ..	632	176	149	2,424,505	455,035	562,245	158,212
1896 ..	441	180	149	1,607,144	328,059	424,839	125,706
Increase ..	191	..	..	817,361	126,976	137,406	32,506
Decrease ..	..	4	..	..	..	..	..

Census Year.	Beer made, 1900 and 1895.		Approximate Value of		
	Quantity.	Value.	Land.	Buildings.	Machinery and Plant
	Gal.	£	£	£	£
1901	7,379,581	553,627	78,694	139,014	76,884
1896	5,249,278	336,734	51,533	115,033	63,850
Increase ..	2,130,303	216,893	27,161	23,981	13,034

MALTHOUSES.

At 33 malthouses, which were in connection with the breweries before mentioned, 623,686 bushels of barley were malted, being in excess of the quantity for 1895 by 267,278 bushels, or nearly 75 per cent. The large additional quantity of beer made in 1900 required increased operations in malting.

Census Year.	Number of Works.	Hands Employed.	Wages paid.	Machine-power used.					Amount of Horse-power.
				Steam.	Water.	Gas.	Horse.	Hand.	
			£						H.-p.
1901 ..	33	145	14,994	5	1	4	2	21	110
1896 ..	31	95	9,398	3	1	1	1	25	59
Increase	2	50	5,596	2	..	3	1	..	51
Decrease	..	..	..	..	..	..	..	4	..

Census Year.	Value of Materials used.	Barley malted, 1900, 1895.		Approximate Value of		
		Quantity.	Value.	Land.	Buildings.	Machinery and Plant.
	£	Bushels.	£	£	£	£
1901 ..	72,211	623,686	105,671	23,920	41,110	10,008
1896 ..	52,881	356,408	82,096	6,685	27,910	2,909
Increase	19,330	267,278	23,575	17,235	13,200	7,099

NOTE.—In some cases the value of land, buildings, and plant has been included in the returns furnished by proprietors of breweries to which the malthouses belong.

COLONIAL-WINE MAKING.

Besides 26,513 gallons of colonial wine made in 1900, and also 400 gallons of brandy used to fortify the wine, 27,537 gallons of cider were manufactured. These results are satisfactory on comparison with those of 1895, when the wine amounted to 15,860 gallons. The quantity of cider increased from 19,178 gallons to 27,537 gallons. The value of produce increased from £8,963 in 1895 to £10,330 in 1900.

Census Year.	Number of Works.	Hands.		Wages.		Machine-power used: Steam.	Horse-power.	Wine made.	Cider.	Value of Products, 1900–1895.	Approximate Value of		
		M.	F.	M.	F.						Land.	Buildings.	Machinery and Plant.
				£	£		H-p.	Galls.	Galls.	£	£	£	£
1901 ..	14	49	10	2,320	92	2	14	26,513	27,537	10330	10156	5,074	2,953
1896 ..	19	41	12	1,925	95	2	6	15,860	19,178	8,963	8,224	2,929	1,679
Incr.	..	8	..	395	..	..	8	10,653	8,359	1,367	1,932	2,145	1,274
Decr.	5	..	2	..	3	..	..	..	..	..	..	..	..

AERATED-WATER AND CORDIAL FACTORIES.

Although the number of factories under this head slightly decreased between the censuses of 1896 and 1901, the operations were very much greater in the year 1900 than in 1895, and with this is shown increase of value of manufactures, as well as quantity, to a considerable extent, besides a greater number of persons employed.

The money value of all manufacture for 1900 amounted to £151,811, against £98,609 in 1895; an increase of nearly 54 per cent. Over £10,000 of additional money was paid in wages during the later year, while an increase from 1,091,580 dozen of aerated-water bottled to 1,886,024 dozen, besides a greatly enlarged business in cordials, tonic beer, and other drinks is recorded. The full particulars are tabulated below:—

Census Year.	No. of Works.	Hands employed.		Wages paid.		Machine-power used.					Horse-power.
		M.	F.	M.	F.	Steam.	Water.	Horse.	Gas.	Hand, Oil, and Electrical.	
				£	£						H.-p.
1901 ..	125	437	15	31,771	284	49	10	21	34	12	250
1896 ..	132	330	17	21,184	261	46	17	11	24	35	216
Incr.	..	107	..	10,587	23	3	..	10	10	..	34
Decr.	7	..	2	..	..	..	7	..	..	23	..

Census Year.	Manufactures for the Years 1900 and 1895.						Total Value of Manufactures	Approximate Value of		
	Aerated Waters.	Cordials.	Tonic Beer.	Miscellaneous.		Cider.		Land.	Buildings.	Machinery and Plant.
				Quan.	Value.					
	Doz.	Doz.	Doz.	Gals.	£	Gals.	£	£	£	£
1901 ..	1,886,024	25,478	89,821	13,356	5,356	9,950	151,811	33,037	34,875	37,266
1896 ..	1,091,580	20,720	17,415	8,907*	1,350	†50	98,609	19,476	32,439	37,429
Inc.	794,444	4,758	72,406	4,449	4,006	..	53,202	13,561	2,436	..
Dec.	..	..	..	..	..	..	..	..	..	163

* Including 6,000 gallons vinegar. † Casks.

Coffee and Spice Works.

The number of these works was 18, the same as in 1896, but the hands fell from 119 to 78. The value of manufactured goods declined from £74,339 to £45,628 in the five years.

Sauce- and Pickle-making.

This industry progresses steadily. It employed 77 males and 51 females in 1901. Sauces and pickles were manufactured to the value of £31,258 in the previous year, more than double the amount made five years ago.

Census Year.	Number of Works.	Hands employed		Wages paid.		Machine-power used.	Amount of Horse-power..	Value of Materials used.
		M.	F.	M.	F.	Steam.		
				£	£		H.-p.	£
1901 ..	23	77	51	4,628	1,760	4	71	20,505
1896 ..	24	44	24	1,835	622	3	57	7,934
Increase ..	..	33	27	2,793	1,138	1	14	12,571
Decrease..	1	..	..	..	..	..	..	..

Census Year.	Manufactures for the Years 1900 and 1895.					Total Value of Manufactures.	Approximate Value of		
	Sauces.		Pickles.		Other Condiments.		Land.	Buildings.	Machinery and Plant.
	Quantity.	Value.	Quantity.	Value.					
	Doz. Pnts	£	Doz. Pnts	£	£	£	£	£	£
1901 ..	44,604	11,128	31,110	10,378	9,752	31,258	17120	12,375	7,220
1896 ..	20,539	6,229	9,949	3,793	3,395	13,417	5175	5,160	1,574
Increase	24,065	4,899	21,161	6,585	6,357	17,841	11945	7,215	5,646

Soap and Candle Works.

The development of these works was at a moderate rate only between 1896 and 1901, the value of manufactures of all kinds reaching to £158,649 for the year 1900, and £152,298 for 1895. In 1900, 92,321 cwt. of soap were made, and 26,690 cwt. of candles, besides other manufactures to the value of £20,611.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.		Amount of Horse-power.	Value of Materials used.
		M.	F.	M.	F.	Steam.	Water, Gas, Hand.		
				£	£			H.p.	£
1901 ..	24	224	8	19,009	239	20	4	346	112 623
1896 ..	22	187	3	16,882	21	17	..	252	98,194
Increase ..	2	37	5	2,127	218	3	4	94	14,429

Census Year.	Manufactures for 1900 and 1895.				Total Value of Manufactures.	Approximate Value of		
	Soap.		Candles.	Value of other Manuf'ctrs		Land.	Buildings.	Machinery and Plant.
	Quantity.	Value.	Value.					
	Cwt.	£	£	£	£	£	£	£
1901 ..	92,321	76,591	61,447	20,611	158,649	10,432	27,184	29,193
1896 ..	85,637	71,382	58,512	22,404	152,298	9,884	20,110	28,832
Increase	6,684	5,209	2,935	..	6,351	548	7,074	361
Decrease	..	..	..	1,793	..	..	..	..

Cooperages.

These numbered 23, according to the returns for 1901. 47,072 casks were made in 1900, against 33,418 in 1895, and the manufacture of kegs increased greatly. The 1901 returns show also the construction of butter-boxes to the number of 159,147, and of cheese-cases 33,165, against 78,378 and 3,660 respectively for 1896.

Census Year.	Number of Works.	Hands employed.		Wages.	Machine-power used.		Horse-power.	Value of Materials used.
		M.	F.		Steam.	Gas.		
				£			H.-p.	£
1901	23	137	1	10,923	16	1	177	19,942
1896	21	76	..	4,250	10	..	110	10,281
Increase ..	2	61	1	6,673	6	1	67	9,661

Census Year.	Manufactures for the Years 1900 and 1895.				Total Value of Output.	Approximate Value of		
	Kegs.	Casks.	Butter boxes.	Cheese-cases.		Land.	Build-ings.	Machinery and Plant.
	No.	No.	No.	No.	£	£	£	£
1901	12,585	47,072	159,147	33,165	37,521	5,669	7,815	8,303
1896	1,680	33,418	78,378	3,660	19,233	3,297	3,353	4,525
Increase ..	10,905	13,654	80,769	29,505	18,288	2,372	4,462	3,778

Sawmills, and Sash and Door Factories.

There has been a very great development of this industry since 1896. Although only 35 additional mills were returned as working in 1901, the hands employed increased from 4,059 to 6,812, and the (first-cut) sawn timber from 191,053,466 ft. to 261,583,518 ft., an addition of 70,530,052 ft. The figures given for resawing, moulding, &c., show a retrograde movement, but the number of doors and sashes made increased from 61,550 to 91,376 in five years; and the total money value of all manufactures or produce of the sawmills reached the sum of £1,268,689 against £898,807 at the previous census. The value of the plant largely increased.

The quantity of first-cut sawn timber for the year 1900 was far greater in the Auckland Provincial District than in any other, the order being as follows:—

	Feet of Timber sawn (first cutting).
Auckland	109,124,543
Wellington	41,375,471
Otago	40,482,149
Hawke's Bay	22,382,990
Westland	13,971,951
Nelson	12,212,951
Taranaki	11,881,139
Marlborough	5,437,365
Canterbury	4,714,959

The increase at Auckland in five years is from 79,464,526 ft. to 109,124,543 ft. At Westland also the increase is noticeably great, considering the magnitude of the industry there.

Census Year.	No. of Mills.	Hands employed.		Wages paid.		Motive-power used.			Amount of Horse-power.
		M.	F.	M.	F.	Steam.	Water.	Gas.	
				£	£				H.-p.
1901.. ..	334	6,805	7	513,622	266	317	24	3	8,744
1896.. ..	299	4,055	4	323,223		274	29	1	6,409
Increase ..	35	2,750	3	190,665		43	..	2	2,335
Decrease ..	..	..	..	..		..	5	..	..

Census Year.	Output for the Years 1900 and 1895.						
	Sawn Timber.		Value of Posts, Rails, &c.	Re-sawing, Planed, Flooring, Skirting, &c.		Mouldings.	
	Quantity.	Value.		Quantity.	Value.	Quantity.	Value
	Ft.	£	£	Ft.	£	Run. ft.	£
1901 ..	261,583,518	971,048	19,277	34,824,246	172,127	9,152,598	42,970
1896 ..	191,053,466	627,959	10,998	41,026,223	173,765	12,653,368	44,104
Inc. ..	70,530,052	343,089	8,279	..	..	..	..
Dec. ..	..	..	..	6,201,977	1,638	3,500,770	1,134

Census Year.	Output for 1900 and 1895—*continued.*		Total Value of all Output.	Approximate Value of		
	Doors and Sashes.			Land.	Buildings.	Machinery and Plant.
	Quantity.	Value.				
	No.	£	£	£	£	£
1901 ..	91,376	63,267	1,268,689	187,398	108,015	408,207
1896 ..	61,550	41,981	898,807	186,958	100,667	298,797
Inc. ..	29,826	21,286	369,882	440	7,348	109,410

GASWORKS.

The operations of the gasworks in the colony for the year 1900, contrasted with those for 1895 and 1890, show such expansion as must be considered highly satisfactory, and this notwithstanding the increased use of electricity in substitution for gas.

There were 30 gasworks at the time of the census of 1901, employing 572 hands, against 27, with 295, in 1896. The wages paid in 1900 amounted to over £70,000 sterling, against £38,000 in 1895, and the value of all produce was £290,567, against £199,025.

In quantity, 786 million cubic feet of gas are shown to have been manufactured in 1900, against 532 million feet for 1895, besides increased quantities of coke, tar, and other residuals.

Census Year.	No. of Works.	Hands employed.		Wages paid.		Machine-power used.			Amount of Horse-power.	Produce for the Years 1900 and 1895.	
										Gas made.	
		M.	F.	M.	F.	Steam	Water.	Gas.		Quantity.	Value.
				£	£				H.-p.	Cubic feet.	£
1901 ..	30	568	4	70,388	185	24	1	12	242	786,531,150	245,000
1896 ..	27	293	2	37,747	102	19	1	8	126	532,060,300	178,196
Increase	3	275	2	32,641	83	5	..	4	116	254,470,850	66,804

Census Year.	Produce for the Years 1900 and 1895—*continued.*					Total Value of all Produce.	Approximate Value of		
	Coke.		Tar.		Other Residuals: Value.		Land.	Buildings.	Machinery and plant.
	Quantity.	Value.	Quantity.	Value.					
	Tons.	£	Gallons.	£	£	£	£	£	£
1901 ..	38,830	32,968	693,181	11,665	934	290,567	65,555	88,874	817,130
1896 ..	17,339	14,446	345,632	4,649	1,734	199,025	41,422	79,610	645,641
Incr.	21,491	18,522	347,549	7,016	..	91,542	24,133	9,264	171,489
Decr.	..	..	..	..	800	..	..	..	..

Lime and Cement Works.

Fifteen of these works, employing 184 hands, were in operation in 1901. In 1896, only 79 hands were returned. The value of manufacture for 1900 was three times as great as that for 1895, and that of machinery used more than doubled during the five years.

Census Year.	Number of Works.	Hands employed.	Wages paid.	Motive Power.		Horse-power.
		Males.	Males.	Steam.	Horse.	
			£			H.-p.
1901	15	184	16,577	3	2	466
1896	14	79	5,560	..	..	289
Increase ..	1	105	11,017	..	..	177

Census Year.	Value of Materials used in 1900 and 1895.	Total Value of Manufactures for 1900 and 1895.	Approximate Value of		
			Land.	Buildings.	Machinery and Plant.
	£	£	£	£	£
1901	18,397	45,142	3,881	10,218	24,337
1896	4,631	15,881	3,181	7,270	11,968
Increase ..	13,766	29,261	700	2,948	12,369

Brick, Tile, and Pottery Works.

These works employed in 1900 close on double the number of hands that were engaged in 1895, and the number of bricks rose

from 18,800,000 to 40,900,000 for those years. The value of pottery made, including drain-pipes, rose from £31,503 to £34,810; and the total value of all the manufactures from £66,140 to £122,230. Otago shows first in the output of bricks made, Canterbury next, then Auckland, while Wellington takes the fourth place. The number of brick, stone, or concrete houses increased between the last two censuses from 6,490 to 7,517, a rate of 13·66 per cent., while those of cob, sod, huts, &c., decreased substantially in number. Houses built of wood or iron increased from 134,092 to 153,945, the rate, 14 per cent., being slightly higher than that which obtained for brick and stone dwellings.

Census Year	Number of Works.	Hands employed.		Wages paid.		Machine-power used.					Amount of Horse-power.	Number of Machines used.	
		M.	F.	M.	F.	Steam.	Gas.	Horse.	Water.	Hand.		For tempering or crushing Clay.	For making Bricks or Pottery.
				£	£						H.p.		
1901 ..	108	838	..	63,336	.. 63	1	39	1	4		659	109	77
1896 ..	108	454	1	28,179	50 38	1	70	..	1		519	108	92
Increase	..	384	..	35,157	.. 25	..	..	1	3		140	1	..
Decrease	..	..	1	..	50 ..	..	31	..	..		..	..	15

Census Year.	Manufactures for the Years 1900 and 1895.					
	Bricks made.			Pottery, &c., made.		
	Common.	Fire-bricks.	Value.	Drain-pipes.	Tiles.	Flower-pots.
	No.	No.	£	No.	No.	Doz.
1901 ..	40,976,765	313,551	86,578	1,226,296	310,076	3,111
1896 ..	18,805,715	193,600	34,637	1,175,065	464,851	8,347
Increase	22,171,050	119,951	51,941	51,231	..	..
Decrease	..	..	..	..	154,775	5,236

Census Year.	Manufactures, 1900 and 1895—*continued.*		Total Value of Manufactures.	Approximate Value of		
	Pottery, &c., made.			Land.	Buildings.	Machinery and Plant.
	Miscellaneous: Value.	Total Value of Pottery, &c.				
	£	£	£	£	£	£
1901 ..	7,475	34,810	122,230	41,123	37,718	35,726
1896 ..	4,249	31,503	66,140	24,074	24,917	27,594
Increase	3,226	3,307	56,090	17,049	12,801	8,132

Tinware Factories.

A large development is observed in respect of this industry. The value of the manufacture rose from £63,723 in 1895 to £98,587 in 1900. In 1890 the value of the goods was only £14,297. The number of hands increased from 289 to 337 in five years, and the establishments from 34 to 60, and the wages paid from £19,742 to £23,107. But the increase shown in this industry is largely due to the inclusion in the later year of small establishments of which no account was taken in 1896.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Motive Power.		
		M.	F.	M.	F.	Steam.	Water.	Gas.
				£	£			
1901	60	336	1	23,107	36	1	1	7
1896	34	288	1	19,742	..	*	*	*
Increase ..	26	48	..	3,365	36	..	..	..

Census Year.	Horse-power.	Value of Materials used in 1900 and 1895.	Total Value of Manufactures and Repairs in 1900 and 1895.	Approximate Value of		
				Land.	Buildings.	Machinery and Plant.
	H.-p.	£	£	£	£	£
1901	23	52,553	98,587	24,907	22,100	9,907
1896	27	32,835	63,723	10,660	7,475	7,714
Increase ..	..	19,718	34,864	14,247	14,625	2,193
Decrease ..	4	..	..	..	..	..

* Information not available.

Iron and Brass Foundries; Boiler and Range-making; with Engineering.

The total value of the manufacture (including repairs) in connection with these industries was returned for the year 1900 at £924,171, or more than three times the amount for 1895, which was £302,815. This great increase is nearly all found in the figures for Otago, where the value of manufacture given at last census had reached £512,021, no doubt being swelled by the dredge-making work. There were 1,948 more hands employed in 1901 than five years previously, or an increase of 118·64 per cent., the actual number of persons being 3,590, against 1,642 for the earlier year. That a considerable development of the business would be exhibited was of course expected, on account of the stimulus given by the growing requirement for dredges in procuring gold from river-beds, &c.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Horse-power.
		Male.	Female.	Male.	Female.	
				£	£	H.-p.
1901	111	3,580	10	306,778	431	1,577
1896	90	1,639	3	129,699	64	1,093
Increase ..	21	1,941	7	177,079	367	484

Census Year.	Value of Materials used or operated on.	Total Value of Manufactures (including Repairs).	Approximate Value of		
			Land.	Buildings.	Machinery and Plant.
	£	£	£	£	£
1901	446,507	924,171	127,346	89,001	177,935
1896	100,273	302,815	70,811	55,152	126,172
Increase ..	346,234	621,356	56,535	33,849	51,763

NOTE.—The above table does not include fifteen Government Railway and Maintenance workshops (eight Railway workshops and seven Maintenance workshops): Hands employed in year 1900, 1,626; wages paid, £185,355; horse-power employed 760; materials used, £192,050; manufactures and repairs (3 locomotives, 34 bogie carriages, 20 bogie brake-vans, 441 wagons, 1,102 taupaulins, and repairs to the value of £36,306); the total value of manufactures and repairs in the Railway workshops being £365,946, and the value of machinery and plant, £97,659. The value of materials used and value of repairs are not stated in Maintenance workshops returns.

AMMUNITION WORKS.

There is an ammunition factory in the Auckland District, where 105 hands are actively employed. To give more details might be considered a breach of confidence.

AGRICULTURAL IMPLEMENT FACTORIES.

Although the numbers of factories and hands employed as shown in the latest returns do not indicate development, the total value of all manufacture appears to have increased from £102,054 to £138,094, including repairs. The number of implements made during 1900 is greater under nearly all descriptions than for 1895.

From whatever cause it may arise that the hands are returned as only 584, against 581 in 1895, the fact remains that the operations in the factories were very much greater in 1900 than five years before. This is clearly shown, both as to money value for the total and as to number of implements, under a long series of descriptive headings:—

Census Year.	Number of Works.	Hands employed.		Wages paid.		Motive-power.		Horse-power.	Value of all Materials used.
		M.	F.	M.	F.	Steam.	Water.		
				£	£				£
1901 ..	33	584	2	53,879	62	23	1	360	49,072
1896 ..	34	581	..	44,581	..	23	..	217	26,904
Increase ..	..	3	2	9,298	62	..	1	143	22,168
Decrease ..	1	..	..	..	..	..	..	..	..

Census Year.	Manufactures for Years 1900 and 1895.								
	Ploughs.	Harrows.	Disc and Spade Harrows.	Horse-hoes, Cultivators, and Grubbers.	Sowers and Drills.	Rollers.	Farm Drays and Wagons.	Horse Hay-rakers.	Chaff-cutters.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
1901	869	864	344	292	219	242	358	22	196
1896	590	578	208	377	182	104	169	18	38
Increase ..	279	286	136	..	37	138	189	4	158
Decrease ..	..	..	..	85	..	..	..	..	..

Census Year.	Manufactures for Years 1900 and 1895—*continued.*							
	Turnip-cutters	Seed Threshing and Cleaning Machinery	Straw elevators.	Windmills.	Wool-presses.	Swingletrees and Yokes.	Sheep-racks.	Various Machines Unspecified (Value).
	No.	No.	No.	No.	No.	No.	No.	£
1901	46	25	17	75	89	1,845	..	15,157
1896	18	6	4	69	95	69	31	12,743
Increase	28	19	13	6	..	1,776	..	2,414
Decrease	..	..	..	..	6	..	31	..

Census Year.	Total Value of Manufactures (including Repairs).	Approximate Value of		
		Land.	Buildings.	Machinery and Plant.
	£	£	£	£
1901	138,094	19,591	21,504	20,244
1896	102,054	19,900	21,336	30,031
Increase	36,040	..	168	..
Decrease	..	309	..	9,787

Printing and Bookbinding Establishments.

This industry ranks amongst the first in respect of employment of hands. 2,627 males and 507 females were returned as engaged in it at last census, the males increasing from 2,123 in 1896 to 2,627 in 1901. Female hands have increased greatly. In 1891 there were only 196; in 1896 the number was 228, while in 1901 it had risen to 507, women and girls. As to the value of product it was set down for the year 1900 at £704,285, against £389,124 five years earlier; but how far these last figures can be relied on is uncertain. There is difficulty in making them up.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.		
		M.	F.	M.	F.	Steam.	Water.	Gas.
				£	£			
1901 ..	188	2,627	507	268,041	16,564	19	14	93
1896 ..	154	2,123	228	204,165	12,137	22	16	50
Increase	34	504	279	63,876	4,427	..	..	43
Decrease	..	..	..	..	..	3	2	..

Census Year.	Machine-power used—*continued.*			Horse-power.	Value of all Products.	Approximate Value of		
	Electric.	Oil.	Hand.			Land.	Buildings.	Machinery and Plant.
				H. p.	£	£	£	£
1901 ..	5	8	73	956	704,285	109,130	160,787	289,621
1896 ..	..	3	64	532	389,124	68,847	124,369	203,699
Increase	5	5	9	424	315,161	40,283	36,418	85,922

NOTE.—The table does not include particulars for Government Printing Office.

COACH-BUILDING AND PAINTING.

The value of the manufacture and repairs rose from £148,969 in 1895, to £216,077 in 1900, an increase of £67,108, or a rate of 45·05 per cent. The hands employed also increased from 807 to 1,185.

Census Year.	Number of Works.	Hands employed.	Wages paid.	Machine-power used.		
		M.	M.	Steam.	Gas.	Water.
			£			
1901	160	1,185	83,356	17	9	2
1896	116	807	57,377	19	4	2
Increase ..	44	378	25,979	..	5	..
Decrease ..	..	..	..	2	..	..

Census Year.	Amount of Horse-power.	Total Value of Manufactures (including Repairs).	Approximate Value of		
			Land.	Buildings.	Machinery and Plant.
		H.-p.	£	£	£
1901 ..	128	216,077	70,622	55,972	24,217
1896 ..	119	148,969	41,376	40,076	24,350
Increase ..	9	67,108	29,246	15,896	..
Decrease ..	..	..	..	..	133

Cycle Works.

A very great advance has been made since 1896, as the number of works was found to be 71 against 19, and 378 males besides 17 females were engaged, being an increase of 270 persons on the number previously shown. The value of the manufacture and repairs rose from £18,817 for the year 1895 to £65,047 for 1900, or at the rate of 245·7 per cent. Cycles being now used not only for pleasure and exercise, but also in business to a certain extent, the industry of making and repairing these articles is necessarily found expanding with time.

Among the establishments shown for 1901 there are indeed a considerable number of purely repairing-shops, and these were not taken into account at the previous census. But apart from this qualification the returns show a large genuine increase in the operations.

Census Year.	Number of Works.	Hands.		Wages.		Machine-power used.			Amount of Horse-power.
		M.	F.	M.	F.	Steam.	Gas.	Water.	
				£	£				H.-p.
1901	71	378	17	20,873	570	4	15	1	95
1896	19	125	..	5,952	..	4	4	..	33
Increase ..	52	253	17	14,921	570	..	11	1	62

Census Year.	Value of Materials used in 1900 and 1895.	Number of Cycles manufactured in 1900 and 1895.	Total Value of Manufactures (including Repairs), 1900 and 1895.	Approximate Value of		
				Land.	Buildings.	Machinery and Plant.
	£		£	£	£	£
1901	26,824	1,988	65,047	31,465	24,431	9 507
1896	7,696	734	18,817	7,925	12,240	4,666
Increase ..	19,128	1,254	46,230	23,540	12,191	4,841

Saddlery and Harness Works.

Of these, 115 were returned. In the total value of manufacture and repairs there is an increase, caused chiefly by the inclusion in 1901 of small saddlers' shops which were not reckoned as factories in 1896.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Value of Materials used, 1900.
		M.	F.	M.	F.	
				£	£	£
1901*	115	629	23	40,808	1,026	75,724

* Including a number of small saddlery and harness-making concerns, which were not dealt with as "factories" at the previous census.

Census Year.	Total Value of Manufactures (including Repairs), 1900.	Approximate Value of		
		Land.	Buildings.	Machinery and Plant.
	£	£	£	£
1901*	147,626	54,380	37,035	5,144

* Including a number of small saddlery and harness-making concerns, which were not with as "factories" at the previous census.

Brush and Broom Making.

These works numbered 12 in 1901, against 15 in 1896. The hands employed numbered 128 at last census, and the value of manufactured articles for the year 1900 was returned at £21,131.

Fellmongering, Tanning, Currying, and Woolscouring.

Good progress was made in this industry between 1896 and 1901, not so much in the direction of increasing the number of establishments; but in hands employed, with quantity and value of manufacture. The hands increased from 1,629 to 1,963, and the wool scoured or sliped from 19,723,481 lb. to 25,793,239 lb. The value of all produce or manufacture for 1900 was £1,888,107, against £1,237,252 in 1895, or more than 50 per cent. in five years.

Census Year.	No. of Works.	Hands employed.		Wages paid.		Motive Power.				Horse-power.	Number of Tan-pits.	Value of Hides, Skins, &c., operated on.	Value of Bark, Coal, Soap, &c.
		M.	F.	M.	F.	Steam.	Water.	Gas.	Oil.				
		No.	No.	£	£					H.-p.	No.	£	£
1901 ..	119	1,957	6	159,180	162	57	9	1	1	1,108	1,216	1,161,965	229,358
1896 ..	117	1,623	6	116,715	268	49	8	..	1	686	1,252	..	134,176
Increase	2	334	..	42,465	..	8	1	1	..	422	..	..	95,182
Decrease	..	..	..	..	106	..	..	..	..	..	36	..	..

Census Year.	Tons of Bark used, and Kind.					Manufactures or Produce for the Years 1900 and 1895.		
	Wattle.		New Zealand.	Other Kinds.	Total.	Wool Scoured and Sliped.	Skins stripped of Wool.	Hides tanned.
	Australia.	Tasmania.						
	Tons.	Tons.	Tons.	Tons.	Tons.	Lb.	No.	No.
1901 ..	3,384	305	465	1,177	5,331	25,793,239	4,026,598	178,075
1896 ..	3,419	1,423	359	24	5,225	19,723,481	3,879,560	154,505
Increase	..	..	106	1,153	106	6,069,758	147,038	23,570
Decrease	35	1,118	..	..	..	..	..	..

Census Year.	Manufactures or Produce for the Years 1900 and 1895—*cont.*			Total Value of Produce and Manufactures for the Years 1900 and 1895.	Approximate Value of		
	Skins tanned.	Pelts Salted or Preserved.	Other Products.		Land.	Buildings.	Machinery and Plant.
	No.	No.	£	£	£	£	£
1901 ..	272,775	4,031,974	54,296	1,888,107	52,319	102,855	80,778
1896 ..	356,918	1,418,792	..	1,237,252	41,490	77,186	52,729
Increase	..	2,613,182	..	650,855	10,829	25,669	28,049
Decrease	584,143	..	..	..	..	..	..

Ship and Boat Building.

The reports on the censuses of 1891 and 1896 were to the effect that this industry was not shown as a thriving one by the returns. In the table now put forward the results are better, as to number of hands employed, vessels built, and total value of all manufacture for the year 1900. But the number of establishments has fallen from 40 to 32, and boat-building is shown to have declined.

Census Year.	Number of Yards.	Hands employed.	Wages paid.	Total Value of all Manufactures (including Repairs), 1900 and 1895.
		M.	M.	
			£	£
1901	32	211	13,476	45,811
1896	40	108	6,724	25,233
Increase ..	..	103	6,752	20,578
Decrease ..	8	..	..	..

Sail, Tent, and Oilskin Factories.

As with the ship and boat-building yards, these industries show a decrease in the number of works, but a considerable increase in the number of hands employed, and in the value of the output. The total value of manufactures in 1900 was returned at £44,854, against £30,166, in 1895.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Value of Materials used.	Total Value of all Manufactures, 1900 and 1895.	Approximate Value of		
		M.	F.	M.	F.			Land.	Buildings.	Machinery and Plant.
				£	£	£	£	£	£	£
1901 ..	30	150	81	10,446	1,996	24,628	44,854	22,976	15,700	2,217
1896 ..	39	92	51	5,660	1,361	..	30,166	13,105	9,825	693
Increase	..	58	30	4,786	635	..	14,688	9,871	5,875	1,524
Decrease	9	..	..	..	..	..	..	..	..	..

Furniture Factories.

In this branch of industrial work fuller returns have been obtained for 1901 than were secured in 1896. It may be taken, however, as a fact that a substantial rise took place during the five years in the operations of these establishments.

Census Year.	No. of Factories.	Hands employed.		Wages paid.		Motive-power.				
		M.	F.	M.	F.	Steam.	Water.	Gas.	Oil.	Electric.
				£	£					
1901 ..	144	1,243	67	88,843	2,262	17	4	29	2	3

Census Year.	Horse-power.	Value of Material used.	Total Value of all Manufactures.	Approximate Value of		
				Land.	Buildings.	Machinery and Plant.
	H.-p.	£	£	£	£	£
1901	369	101,595	241,024	75,200	71,884	23,254

Chemical Works.

There was up to 1896 a steady growth in the value of the manufacture, from £34,283 in 1885 to 41,586 in 1890, and to £75,320 in 1895; but the value of output for 1900 was £64,834 only. Ninety-five hands were employed at last census in eight establishments.

Woollen Mills.

The woollen mills of the colony are now ten in number, and employed 1,693 persons in 1901, 769 being males, and 924 females. These factories, therefore, provide more occupation for women and girls than for the male sex. The increase in male hands employed is from 655 in 1896 to 769 in 1901, and in females from 761 to 924. In 1891 there were only 373 women and 200 girls.

As to value of manufacture of all kinds, the increase is at the rate of 19 per cent. for five years; the figures being £302,423 for 1895 and £359,382 for 1900.

The increase in quantity of tweed made, from 1,297,012 yards in 1895 to 1,445,867 yards in 1900, or about 12 per cent., is not so great as that in flannel, the production of which reached 1,191,234 yards for 1900. The production of blankets has also greatly developed, the figures being 28,576 pairs in 1895, and 49,523 pairs in 1900. Rugs, shawls, hosiery, and yarn also show high increases:—

Census Year.	Number of Works.	Hands employed.		Wages.		Machine-power used.		Horse-power.
		M.	F.	M.	F.	Steam.	Water.	
				£	£			H.-p.
1901	10*	769	924	71,454	40,547	9	2	1,554
1896	9	655	761	59,583	32,036	9	2	1,400
Increase ..	1	114	163	11,871	8,511	..	..	154

Census Year.	Wool used in 1900 and 1895.		Value of Other Materials used.	Manufactures for the Years 1900 and 1895.			
	Quantity.	Value.		Tweed.	Cloth.	Flannel.	Blankets.
	Lb.	£	£	Yds.	Yds.	Yds.	Pairs.
1901	3,257,319	162,920	33,161	1,445,867	..	1,191,234	49,523
1896	3,485,893	100,135	39,182	1,297,012	357,228	554,256	28,576
Increase ..	..	62,785	..	148,855	..	636,978	20,947
Decrease ..	228,574	..	6,021	..	357,228	..	..

Census Year.	Manufactures for Years 1900 and 1895—*contd.*			Total Value of Manufactures.	Approximate Value of		
	Shawls and Rugs.	Shirting.	Other Manufactures.		Land.	Buildings.	Machinery and Plant.
	No.	Yds.		£	£	£	£
1901	26,806	..	†	359,382	11,264	93,454	172,704
1896	20,020	15,384	†	302,423	11,050	68,358	144,065
Increase ..	6,786	..	..	56,959	214	25,096	28,639
Decrease ..	..	15,384	..	..	..	..	..

* One mill not in operation.

† "Other manufactures" in 1900 consisted of 234,843 lb. yarn and 53,920 dozen hosiery; and in 1895, of 168,802 lb. and 5,122 spindles of yarn, 21,447 dozen and 28,000 lb. of hosiery, 2,592 knitted garments, and 13,000 mats.

Clothing and Waterproof Factories.

The number of hands increased from 307 males and 1,751 females to 431 males and 2,081 females in five years. Employing, as it now does, about 2,500 persons, this industry ranks high in regard to the absorption of labour, especially that of the female sex, of whom over two thousand are required, as above shown.

The value of all manufacture for the year 1900 was returned at £329,026, against £258,352, in 1895.

The making of waterproof garments is also shown to have developed considerably, whether conducted in combination with clothing factory work of the ordinary kind, or as independent establishments.

CLOTHING FACTORIES.

Census Year.	Number of Factories.	Hands employed.		Wages paid.		Amount of Horse-power.	Total Value of Manufactures, 1900 and 1895.	Approximate Value of		
		M.	F.	M.	F.			Land.	Buildings.	Machinery and Plant.
				£	£	H.-p.	£	£	£	£
1901 ..	21	431	2,081	37,778	63,023	67	329,026	31,200	46,615	11,432
1896 ..	27	307	1,751	26,450	46,789	62	258,352	18,550	29,900	8,254
Increase ..		124	330	11,328	16,234	5	70,674	12,650	16,715	3,178
Decrease	6	..	..	..	..	..	..	..	..	..

In addition to clothing factories, six establishments were in 1901 engaged in the manufacture of waterproof garments only. These in 1900 turned out 15,384 waterproofs, valued at £13,378; besides which 25,196 waterproof garments were made in the clothing factories.

WATERPROOF MAKING.

Census Year.	Number of Factories.	Hands employed.		Wages paid.		Amount of Horse-power.	Approximate Value of		
		M.	F.	M.	F.		Land.	Buildings.	Machinery and Plant.
				£	£	H.-p.	£	£	£
1901 ..	6	22	92	1,807	2,822	3	3,020	3,655	1,170
1896 ..	4	15	78	1,344	2,540	2	2,650	1,900	766
Increase	2	7	14	463	282	1	370	1,755	404

BOOT AND SHOE FACTORIES.

The total value of all manufactures, as brought out, is £529,254 for 1900. The output from the factories during 1900 was 1,161,873 pairs of boots and shoes, 104,583 pairs of slippers, and 166,027 pairs of uppers.

Excluding gum-boots, during 1900 boots and shoes to the value of £187,629 were imported into the colony, nearly the whole being subject to a duty of 22½ per cent. The United Kingdom supplied to the value of £126,705, and the United States of America £42,658. Besides these were imported boot and shoe vamps and uppers,

valued at £8,100. The exports of leather, the produce of the colony, during the same period, were valued at £112,867, and of boots and shoes made in New Zealand, £534.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Power.				Horse-power.
		M.	F.	M.	F.	Steam.	Water.	Gas.	Hand and Oil.	
				£	£					H.-p.
1901 ..	126*	1,906	790	165,227	27,216	..	2	26	98	184

Census Year.	Value of Materials used in 1900 and 1895.	Manufactures for the Years 1900 and 1895.			Total Value of Manufactures.	Approximate Value of		
		Boots and Shoes.	Slippers.	Uppers.		Land.	Buildings.	Machinery and Plant.
	£	Pairs.	Pairs.	Pairs.	£	£	£	£
1901 ..	273,325	1,161,873	104,583	166,027	529,254	57,415	70,189	49,388

*Including a number of small bootmaking concerns which were not dealt with as "factories" at the previous census.

Hosiery Factories.

At the census of 1896 returns were obtained from 7 stocking-weaving factories, employing 1 male and 132 females. The wages paid amounted to £2,541, and the value of the output to £9,357. The census of 1901 shows a very large increase on these figures, as will be seen in the statement given herewith.

Census Year.	Number of Factories.	Hands employed.		Wages paid.		Motive Power.		Horse-power.	Value of Material used.
		M.	F.	M.	F.	Steam.	Gas.		
				£	£			H.-p.	£
1901 ..	17*	17	265	1,328	6,702	2	5	71	18,032

Census Year.	Manufactures for the Year 1900.				Total Value of Manufactures.	Approximate Value of		
	Half-hose.	Hose.	Shirts and Pants.	Other Knitted Goods.		Land.	Buildings.	Machinery and Plant.
	Quantity.	Quantity.	Quantity.	Value.				
	Dozen.	Dozen.	Dozen.	£	£	£	£	£
1901 ..	39,601	9,529	1,053	480	31,265	4,605	6,790	8,602

* One factory not in operation in 1900, and one factory in operation six months only.

NOTE.—The above table does not include 53,920 dozen hose, half-hose, under-shirts, pants, and other knitted garments which are given in "Woollen-factories" return.

ROPE AND TWINE WORKS.

Rope and twine making would appear to have advanced since 1895, to judge from the value of all manufactures given in the returns, which amounted to £87,863 for the year 1900, against £52,400 five years before. Nevertheless, the actual quantity of rope made represented in weight is shown as slightly less than at the earlier census year. As to materials used, phormium comes by far the first, 1,502 tons for 1900 being utilised, against 1,452 tons in 1895. Of manila only 291 tons were used, against 169 in 1895.

Census Year.	Number of Works.	Hands employed.	Wages paid.	Motive Power.				Horse-power.
		M.	M.	Steam.	Water.	Gas.	Horse.	
			£					H.-p.
1901	17	192	13,136	6	4	1	1	494
1896	24	150	6,840	5	6	..	..	280
Increase ..	..	42	6,296	1	..	1	1	214
Decrease ..	7	..	..	..	2	..	..	..

Census Year.	Materials used in 1900 and 1895.						
	Phormium.		Manila.		Other Materials.		Total Value.
	Tons.	£	Tons.	£	Tons.	£	£
1901	1,502	28,663	291	13,140	87	4,575	46,378
1896	1,452	19,251	169	4,664	85	4,335	28,250
Increase ..	50	9,412	122	8,476	2	240	18,128

Census Year.	Manufactures for 1900 and 1895.				Total Value of all Manufactures.	Approximate Value of.		
	Ropes.	Lines.	Twine.	Other Manufactures.		Land.	Buildings.	Machinery and Plant.
	Tons.	Tons.	Tons.	Tons.	£	£	£	£
1901	274	85	1,727	295	87,863	6,546	9,313	39,450
1896	289	27	1,327	37	52,400	7,247	6,855	26,859
Increase ..	..	58	400	258	35,463	..	2,458	12,591
Decrease ..	15	..	..	..	..	701	..	..

PHORMIUM MILLS.

A complete collapse in this industry was shown by the returns of 1896. At that time only 52 mills were left in operation, and the hands employed had fallen in number to 484 men and 163 boys. The returns for 1901 show a revival in the mills to 101 in operation, with 1,519 men and 179 boys. In 1891 there were 177 mills with

2,169 men and 1,029 boys, so that the development obtained 10 years ago has not been recovered in full, though the position has improved greatly since 1896. The wages paid stood at £101,046 for the year 1900; nearly 100,000 tons of raw material were used, and 12,000 tons of fibre dressed, besides 1,000 tons of tow produced. The money value of the total output was £203,492, against £32,546 in 1895, and £234,266 in 1890.

The export of phormium for twelve years has been as under :—

Year.	Exported. Tons.	Value. £
1890	21,158	381,789
1891	15,809	281,514
1892	12,793	214,542
1893	12,587	219,375
1894	4,677	66,256
1895	1,806	21,040
1896	2,968	32,985
1897	2,769	30,674
1898	4,850	74,556
1899	10,371	184,411
1900	15,906*	332,182
1901	10,171	195,728

* This is greater than the quantity returned as dressed in 1900.

The uncertainty that has attended enterprise in the matter of flax-milling still remains, but an Act has been passed forbidding the shipping of phormium for exportation from New Zealand unless it has been previously inspected by a Government official, and graded under regulations which have been made for the purpose. This will have the effect of preventing badly-dressed flax of an inferior quality from being sent away, and thus injuring the reputation of the article generally by depreciation.

The most important particulars given in the returns are tabulated below :—

Census Year.	Number of Works.	Hands employed.		Wages paid.	Machine-power used.	
		Men.	Boys.		Steam.	Water.
				£		
1901	101	1,519	179	101,046	75	34
1896	52	484	163	17,544	23	30
Increase ..	49	1,035	16	83,502	52	4

Census Year.	Amount of Horse-power.	No. of Machines used.	Raw Material used. 1900 and 1895.		Fibre dressed, 1900 and 1895.	
			Quantity.	Value.	Quantity.	Value.
	H.-p.		Tons.	£	Tons.	£
1901	1,190	105	96,571	53,064	12,035	201,235
1896	553	65	21,770	7,775	2,999	31,771
Increase ..	637	40	7,4801	45,289	9,036	169,464

Census Year.	Tow produced.		Total Value of Output, 1900 and 1895.	Approximate Value of		
	Quantity.	Value.		Land.	Buildings.	Machinery and Plant.
	Tons.	£	£	£	£	£
1901	1,062	2,257	203,492	24,644	11,212	28,590
1896	406	775	32,546	12,448	6,531	12,380
Increase ..	656	1,482	170,946	12,196	4,681	16,210

MINES AND QUARRIES.

Gold-quartz Mining and Crushing.

Returns were received for 120 gold-quartz mining and crushing works in 1901. In 1896 there were 168 of these returned, and 135 in 1891. Of 120 quartz-crushing works in 1901, employing 4,333 hands, 78, with 3,370 persons employed, belonged to Auckland Provincial District, being located at the Thames, Waihi, and surrounding country.

The census tables show £796,871 as the total value of the gold obtained by quartz-crushing in the year 1900. Comparison with the two previous censuses shows the output in 1895 (£492,478) to have been higher than that of 1890, but considerably less than than that for 1900, quoted above.

The value of the machinery and plant for quartz-crushing increased from £241,715 in 1890, and £335,474 in 1895, to £735,927 in 1900.

Census Year.	Number of Works.	Hands employed.	Wages paid.	Machine-power used.		Horse-power.
		M.	M.	Steam.	Water.	
			£			H.-p.
1901	120	4,333	382,658	148	74	5,919
1896	168	2,814	226,791	49	70	3,688
Increase ..	..	1,519	155,867	99	4	2,231
Decrease ..	48	..	..	..	..	..

Census Year.	Quartz crushed.	Gold produced 1900 and 1895.	Silver produced 1900 and 1895.	Value of Gold and Silver produced 1900 and 1895.	Approximate Value of Machinery and Plant.
	Tons.	Oz.	Oz.	£	£
1901 ..	356,058	214,789	326,457	796,871	735,927
1896 ..	163,743	149,612	81,302	492,478	335,474
Increase	192,315	65,177	245,155	304,393	400,453

Hydraulic Gold-mining.

Returns for the purposes of the table showing results of hydraulic gold-mining were obtained from public companies and parties of miners operating on a large scale; but, so far as the numbers of persons employed are concerned, nothing like the actual facts are disclosed, and the quantity of gold shown to have been won must fall far short of the true total. The number of men engaged in all kinds of alluvial gold-mining during the year ended 31st March, 1901, was 7,659 Europeans and 1,576 Chinese. Of these nearly 1,000 were employed in dredging. The hands employed shown in the tables for the two classes of alluvial mining number 1,927, so that there must be some 7,300 Europeans and Chinese whose earnings are not included in the tables.

Census Year.	Number of Works.	Hands employed	Machine-power used.		Amount of Horse-power.	Claims working Day and Night, or Day only.
		M.	Water.	Electricity.	H.-p.	
1901.. ..	130*	962	21	2	342	Day and night, 37 Day only, 87
1896.. ..	105	744	28	2	156	Day and night, 32 Day only, 73
Increase ..	25	218	..	..	186	..
Decrease ..	..	..	7	..	..	..

Census Year.	Expenditure during 1900 and 1895.					Yield of Gold.	Value of Gold.
	Labour.	Water.	Plant and Repairs.	Management.	Total.		
	£	£	£	£	£	Oz.	£
1901	76,008	19,398	26,373	6,652	128,431	35,059	135,944
1896	48,964	17,414	40,183	7,208	113,769	31,161	122,871
Increase ..	27,044	1,984	..	..	14,662	3,898	13,073
Decrease ..	..	..	13,810	556	..	..	..

* Six mines were not in operation during 1900.

Gold-dredging.

During the quinquennial period 1895–1900 this class of industry has become of great importance, not only as a gold-producer, but from the fact that all the works in connection with the building and repairing of dredges is done in the colony. The number of dredges increased from 35 in 1895 to 145 in 1900, and the hands employed from 258 to 965. The yield of gold during 1900 was 71,778 oz., valued at £287,061, against 18,124 oz. and £70,016 in 1895. The expenditure in 1900 was as follows:—

	£
Labour	78,238
Coal, plant, and repairs	188,046
Management	16,308
Total	£282,592

The capital invested in dredging is £690,430, and the value of machinery and plant £528,600. Of the total number, 121 dredges belonged to the Otago Provincial District, 23 to Nelson and Westland, and 1 to Marlborough.

Census Year.	Number of Works.	Hands employed. M.	Machine-power used. Steam.	Water.	Unspecified.	Amount of Horse-power.
						H.-p.
1901 ..	145*	965	134	2	9	3,041
1896 ..	35	258	30	3	..	963
Increase	130	707	104	..	9	2,078
Decrease	..	..	..	1	..	..

Census Year.	Expenditure during 1900 and 1895. Labour.	Coal, Plant, and Repairs.	Management.	Total.	Yield of Gold.	Value of Gold.	Approximate Value of Machinery and Plant.
	£	£	£	£	Oz.	£	£
1901 ..	78,238	188,046	16,308	282,592	71,778	287,061	528,600
1896 ..	27,124	25,159	4,264	56,547	18,124	70,016	86,003
Increase	51,114	162,887	12,044	226,045	53,654	217,045	442,597

* Including 31 dredges not in operation during 1900 and 10 dredges for which no particulars of operations could be obtained. Three of the dredges were working a few months only.

It must be remembered that a great part of the gold yield in the colony is obtained from alluvial workings, of which no returns are required by the Census Act to be rendered, so that the figures given above must not be regarded as showing any approach to the total production, which amounted to £1,439,602, or, with silver, £1,478,481, for the year 1900.

The returns for quartz-mining and gold-dredging are believed to be fairly correct, but those for hydraulic mining fall far short of the total. No attempt has been made to obtain returns from individual miners or small parties, and these comprise the bulk of the alluvial miners.

Collieries.

The table shows the full output of all the collieries in the colony during 1900. The quantity mined was 1,093,990 tons, against 726,654 in 1895, an increase of 367,336 tons or over 50 per cent. The quantity imported during 1900 was 124,033 tons, and the export amounted to 114,358 tons, 112,707 tons of which were New Zealand produce. The number of persons employed in coal-mining increased from 1,799 in 1895 to 2,460 in 1900, and the value of machinery and plant from £148,367 in 1896 to £372,093 in 1901.

Census Year.	Number of Coal-Mines.	Hands Employed.	Wages Paid.	Motive Power.				Horse-power.	Quality of Coal mined during the Year 1900.	
		Males.	Males.	Steam.	Water.	Horse.	Wind.		Brown.	Pitch.
			£					H.-p.	Tons.	Tons.
1901 ..	145	2,460	242,089	32	9	23	2	2,852	339,786	37,804

Census Year.	Quality of Coal mined during the Year 1900 —*contd.*		Total Quantity of Coal won.	Total Cost of Production.	Total Value of Output.	Approximate Value of Machinery and Plant.
	Lignite.	Bituminous and Semi-bituminous.				
	Tons.	Tons.	Tons.	£		£
1901 ..	42,538	673,862	1,093,990	365,787	540,778	372,093

NOTE.—Several private mines worked by owners for their own requirements are not included in the above.

SUMMARISED RESULTS.

A summary of all the information obtained under the Census Act relating to mines and quarries is appended :—

—	Number of Works.			Number of Hands employed.		
	1901.	1896.	1891.	1900.	1895.	1890.
Gold-quartz mining and crushing works	120	168	135	4,333	2,814	1,971
Hydraulic gold-mining	130	105	74	962	744	495
Gold-dredging	145	35		965	258	
Collieries §	145	164	95	2,460	1,799	1,655
Stone (building) quarries ..	8	12	9	58	59	35
Stone (road-metal, &c.) quarries						
Totals	548	484	313	8,778	5,674	4,156

—	Approximate Value of Output.			Approximate Value of Machinery and Plant		
	1900.	1895.	1890.	1900.	1895.	1890.
	£	£	£	£	£	£
Gold-quartz mining and crushing works	796,871	492,478	278,893	735,927	335,474	241,715
Hydraulic gold-mining	135,944	113,769	73,713	207,750	*	154,270
Gold-dredging ..	287,061	70,016		528,600†	‡86,003	
Collieries§ ..	540,778	370,400	279,777	372,093	148,367	155,671
Stone (building) quarries	2,793	6,041	4,487	4,660	4,070	6,744
Stone (road-metal, &c.) quarries	8,371					
Totals ..	1,771,818	1,052,704	636,870	1,849,030	573,914*	558,400

* Value of machinery and plant used in hydraulic gold-mining not returned; capital invested, £505,674. † Capital invested, information incomplete. ‡ Capital invested, £161,990. § Figures for 1895-96 taken from Mines Report; census returns found incomplete, and results not reliable. Value of output taken at 10s. per ton.

SECTION XV.—IMPORTS; CUSTOMS AND EXCISE REVENUE.

Imports.

The quantities and values of imports used in making up the figures given in this portion of the statistical information are obtained from Customs entries, verified where necessary, as with goods subject to an *ad valorem* duty, by examination. For exports, the "free on board in New Zealand" value is given; but, as regards the main items, the Collector of Customs examines carefully the amounts stated, and compares them with current price-lists, to prevent any over-estimate. Goods transhipped at a foreign port are regarded as imported from the country where they were originally shipped, and exports as destined for the country where it is intended to land them. The countries named, however, may not be those of origin or destination, as no attempt is made to trace the goods beyond the ports disclosed by the documents presented to the Customs. Very little cargo *in transitu* passes through New Zealand.

The total declared values of the imports in 1902 amounted to £11,326,723, being a decrease on the corresponding total in 1901 of £491,192. These figures, however, include specie. The value of coin brought into the colony in 1902 was £368,685, against £464,499 in the previous year, and if these amounts are excluded, the decrease on the values of all other articles will be only £395,378.

The value of imports for each of the past fifteen years was:—

Year.	Imports, inclusive of Specie. £	Imports, exclusive of Specie. £
1888	5,941,900	5,430,050
1889	6,308,863	5,980,583
1890	6,260,505	5,928,625
1891	6,503,849	6,431,101
1892	6,943,056	6,742,544
1893	6,911,515	6,494,279
1894	6,788,020	5,990,177
1895	6,400,129	6,115,953
1896	7,137,320	7,035,379
1897	8,055,223	7,994,201
1898	8,230,600	8,211,409
1899	8,739,633	8,613,656
1900	10,646,096	10,207,326
1901	11,817,915	11,353,416
1902	11,326,723	10,958,038

Thus a check has been experienced in the expansion movement observed to have been going on from 1894 to 1901. But in 1901 the Government imported railway plant to the value of about half a million of money, against which the import for 1902 was only about £120,000.

It will be seen that the value of imports, exclusive of specie, rose from £5,430,050 in 1888 to £6,742,544 in 1892, then fell to £5,990,177 in 1894, after which there ensued a steady advance year by year to £11,353,416 in 1901, with a slight falling off in 1902. The movement for the period 1894–1902 is a rise at the rate of 83 per cent. in money value, or a sum of £4,967,861. In quantities of various imports the increases vary, and full particulars of every kind of article imported in 1902 are to be found in detail further on, which may be critically examined with those in similar tables given in the previous Year-books.

The degree of expenditure of loan moneys by the general and local Governments may somewhat affect the question when considering the rise of imports. And, when consulting the figures relating to expenditure out of loan accounts, the matter of aids from the Consolidated Fund (which are included) presents itself, besides other features in connection with this subject.

The expansion of imports is still further to be considered in connection with the condition of the manufactures of the colony, for an increase of imports arising from a decline of internal manufactures would scarcely be regarded as a satisfactory position. But Section XIV., preceding this, exhibits a most substantial general development of the manufactures of New Zealand since 1895, not only in the great primary industries, but throughout.

It is desirable to consider not only the total value of the import trade for different years by comparing figures, but to ascertain the rates *per capita* of population, to judge whether the imports are relatively greater or less than they have been. The fairest comparisons are from calculations made after deducting specie imported, for in the year 1894, as an instance, no less than £797,843 was brought to the colony in coin.

The figures for each year from 1888 stand thus:—

Years.	Imports per head of mean Population, excluding Maoris.	
	Including Specie.	Excluding Specie.
	£ s. d.	£ s. d.
1888	9 16 4	8 19 5
1889	10 5 6	9 15 6
1890	10 0 2	9 11 0
1891	10 6 6	10 4 3
1892	10 16 3	10 9 11
1893	10 9 0	9 16 5
1894	9 19 11	8 16 5
1895	9 4 10	8 16 8
1896	10 1 11	9 19 1
1897	11 3 3	11 1 7
1898	11 3 7	11 3 1
1899	11 13 1	11 9 8
1900	13 18 10	13 7 4
1901	15 3 10	14 11 11
1902	14 3 11	13 14 8

Using the figures exclusive of the specie, it will be seen that, though comparisons for years since 1888 do not show by any means a steady rise since that year, the position is, that whereas the imports proper were only £8 19s. 5d. per head of population in the first period of the table, they had increased by £4 15s. 3d. per head in 1902, and, until last year, increase is observed in each year's figures since 1894.

By means of the accompanying table, in which the articles imported are arranged in groups according to their nature, the increases in value can be traced to their specific heads :—

IMPORTS FOR FIVE YEARS.

Group of Principal Articles imported.	1898.	1899.	1900.	1901.	1902.
	£	£	£	£	£
Apparel and slops ..	354,940	393,689	451,879	463,194	511,397
Boots and shoes ..	130,912	151,593	194,811	211,215	202,931
Cotton piece-goods ..	417,733	447,495	514,607	470,568	498,485
Drapery	343,820	395,696	438,299	443,863	449,503
Haberdashery ..	85,985	84,808	95,401	110,746	102,569
Hats and caps ..	66,416	68,184	66,799	70,013	75,222
Hosiery	75,736	90,545	103,291	101,481	115,071
Linen manufactures ..	56,572	69,167	83,206	89,915	71,170
Millinery	36,074	36,932	43,313	43,380	45,701
Silks	79,910	87,639	97,922	121,937	139,522
Woollens	286,911	297,387	330,713	348,666	393,033
Totals.. ..	1,935,009	2,123,135	2,420,241	2,474,978	2,604,604
Agricultural implements	17,234	17,063	13,508	10,744	11,518
Cutlery	22,722	19,764	23,089	27,149	29,993
Hardware and iron-mongery	248,665	255,701	330,314	315,239	334,965
Rails and railway bolts, &c.	42,773	63,557	118,464	148,344	85,163
Iron and steel, other, pig, wrought, wire, &c.	554,124	632,182	865,361	682,906	815,260
Machinery	422,011	405,551	536,429	600,019	561,649
Nails	36,792	31,363	48,050	40,034	44,114
Railway plant ..	57,224	63,807	63,128	514,511	122,303
Sewing-machines ..	30,618	30,801	37,429	38,227	37,005
Tools, artificers' ..	70,631	59,066	77,447	84,523	88,273
Totals ..	1,502,794	1,578,855	2,113,219	2,461,696	2,130,243
Sugar	425,270	354,925	451,522	489,936	402,138
Tea	183,717	183,691	199,934	219,089	197,127
Totals.. ..	608,987	538,616	651,456	709,025	599,265

IMPORTS FOR FIVE YEARS—*continued.*

Group of Principal Articles imported.	1898.	1899.	1900.	1901.	1902.
	£	£	£	£	£
Beer	37,844	39,166	34,296	34,949	43,627
Spirits*	187,020	215,685	198,282	243,824	235,369
Tobacco	161,836	184,173	198,861	221,889	212,634
Wine	48,514	51,640	55,098	63,837	60,350
Totals.. ..	435,214	490,664	486,537	564,499	551,980
Paper	133,901	135,482	174,111	184,986	181,486
Printed books ..	109,961	132,260	136,891	140,347	149,194
Stationery	98,469	100,875	96,408	113,422	112,676
Totals.. ..	342,331	368,617	407,410	438,755	443,356
Bags and sacks ..	111,116	123,596	141,810	214,987	135,674
Coals	105,223	92,815	120,406	151,334	125,732
Fancy goods	103,786	110,114	128,339	145,356	148,072
Fruits (including fresh, preserved, bottled, dried)	181,447	180,590	226,128	248,985	175,366
Oils	162,523	126,967	206,770	238,396	251,415
Other imports (excluding specie)	2,722,979	2,879,687	3,305,010	3,705,405	3,792,331
Total Imports (excluding specie)	8,211,409	8,613,656	10,207,326	11,353,416	10,958,038
Specie imported ..	19,191	125,977	438,770	464,499	368,685
Total Imports ..	8,230,600	8,739,633	10,646,096	11,817,915	11,326,723

* Includes methylated and perfumed spirits, and spirits of wine.

Of £10,958,038 the total value of goods imported during 1902, the chief items were as under:—

Articles.	Value. £	Proportion per Cent.
Clothing, drapery, &c.	2,604,604	23·77
Metal, machinery, and implements..	2,130,243	19·44
Tea and sugar	599,265	5·47
Wine, beer, spirits, and tobacco ..	551,980	5·04
Paper, books, and stationery ..	443,356	4·04
Other imports	4,628,590	42·24
	£10,958,038	100·00

The declared value of the clothing, drapery, &c., imported increased from £2,474,978 in 1901 to £2,604,604 in 1902. In 1898 the value of these imports was £1,935,009. The iron, machinery, and implements imported in 1902 were valued at £2,130,243, an increase

of £627,449 on the corresponding figures for 1898 (£1,502,794). The value of sugar and tea imported in 1902 shows a decrease, when compared with 1901, of £109,760. Beer, wine, spirits, and tobacco show a decrease of £12,519, from £564,499 in 1901 to £551,980 in 1902.

To the total value of "Other imports (excluding specie)," in 1902 (£3,792,331), shown in the table above, arms, ammunition, and explosives contributed a sum of £129,733; bicycles, tricycles, and fittings, £134,177; drugs, chemicals, and druggists' wares, £240,841; patent medicines, £40,953; manures, £154,964; musical instruments, £110,663; glass and glassware, £138,908; earthenware, £66,975; floorcloth and oilcloth, £74,556; furniture and upholstery, £62,842; cement, £54,811; leather and leather manufactures, £72,789; seeds, £70,720; and timber, £146,561.

Goods imported by means of the "Parcels post" system during 1902 were valued at £123,912.

Goods received from the Cook and other annexed Islands are now treated as New Zealand produce, and not as imports. The total in 1902 was valued at £32,163, and the principal articles of produce as follows: Bêche-de-mer, £117; limejuice, £814; raw coffee, £334; copra, £8,429; raw cotton, £5; fruit, £19,204; candle-nuts, £616; cocoanuts, £388; vanilla beans, £84; hats, £1,235.

Value of Free and Dutiable Imports.

The values of the imports into New Zealand during the years 1901 and 1902 are given in the next table, classified according to the duties to which they were liable, and arranged so as to show the declared value of goods on which specific or *ad valorem* duties at various rates are payable, and of those admitted free of duty:—

Duties to which Imports liable.	Value of Imports, 1901.		Value of Imports, 1902.	
	£	£	£	£
Specific duties	..	2,404,581	..	2,395,274
Ad valorem duties—				
5 per cent.	252,513		176,607	
10 per cent.	170,433		226,994	
15 per cent.	156,777		177,041	
20 per cent.	2,359,311		2,496,376	
22½ per cent.	208,205		201,967	
25 per cent.	994,472		1,084,133	
40 per cent.	1,085		1,166	
Various	8,875		1,584	
Parcels-post (various) ..	109,683		123,912	
		4,261,354		4,489,780
Duty-free (excluding specie)	..	4,687,481	..	4,072,984
Specie imported	..	464,499	..	368,685
Totals	..	11,817,915	..	11,326,723

The proportions of free and dutiable goods imported during 1899, 1900, 1901, and 1902 are compared with similar figures for 1894, the year preceding that in which the altered tariff came into force:—

	1894.	1899.	1900.	1901.	1902.
Merchandise—	£	£	£	£	£
Free	1,871,772	2,942,999	3,727,926	4,687,481	4,072,984
Dutiable	4,118,405	5,670,657	6,479,400	6,665,935	6,885,054
Imports (less specie)	5,990,177	8,613,656	10,207,326	11,353,416	10,958,038
	£	£	£	£	£
Total net duty received*	1,572,467	2,046,452	2,174,498	2,196,767	2,289,783
Duty, per cent. of imports—	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent
(*a.*) On dutiable imports	38·18	36·09	33·56	32·96	33·26
(*b.*) On all merchandise	26·25	23·76	21·30	19 35	20·90

* Including excise duties levied on certain imports manufactured in bond.

Sugar.

The value of sugar (including glucose, molasses, and treacle) imported in 1902 was £402,138, a decrease of £87,798 on the amount for 1901 (£489,936). The value of this import for the last three years has averaged only £447,865 per annum; but for the three years, 1882, 1883, and 1884, the average, with a much smaller population, was £615,207 for each year. The smaller average amount for the last three years is due, not so much to a reduction in the quantity imported as to the fall in the price of sugar, and partly to the fact that the proportion of refined to raw sugar has vastly decreased.

The following figures, giving the consumption per head of sugar in Australasia, are, saving those for New Zealand—and excluding a proportion (30 lb. per head) deducted on account of Maoris—taken from Mr. Coghlan's "Seven Colonies of Australasia, 1901–1902." The figures stating the consumption of tea, given further on, are also taken from the same source:—

Annual Consumption of Sugar per Head in Australasia.

	Lb.		Lb.
Queensland	123·8	South Australia	100·2
Western Australia	114·5	Victoria	93·0
New South Wales	107·8	Tasmania	90·5
New Zealand	104·8		

Tea.

The quantity of tea entered for consumption in 1902 was 5,088,581 lb. Supposing Maoris to use, on an average, 1 lb. per head per annum, the consumption of tea per head of the population, exclusive of Maoris, would be 6·3 lb. in 1902.

ANNUAL CONSUMPTION OF TEA PER HEAD IN AUSTRALASIA.

	Lb.		Lb.
Western Australia	9·8	Victoria	6·9
South Australia	8·1	New Zealand	6·3
New South Wales	7·9	Tasmania	6·2
Queensland	7·4		

BEER, SPIRITS, AND WINE.

During 1902 excise duty was paid on 7,179,360 gallons of beer; and 201,523 gallons of beer, 602,021 gallons of spirits, and 126,450 gallons of wine were entered at the Customs for home consumption.

The actual quantity of beer made and used in the colony has increased from 4,243,760 gallons in 1886 to 7,179,360 gallons in 1902:—

BEER MANUFACTURED IN NEW ZEALAND ON WHICH EXCISE DUTY WAS PAID.

	Gal.		Gal.
1886	4,243,760	1895	4,936,400
1887	4,264,160	1896	5,382,960
1888	4,050,560	1897	5,741,200
1889	4,402,480	1898	6,013,120
1890	4,676,240	1899	6,261,200
1891	4,567,920	1900	6,811,280
1892	4,752,720	1901	7,134,800
1893	4,873,600	1902	7,179,360
1894	4,807,360		

The following table gives the consumption per head of alcoholic liquors by the people, excluding and including Maoris, showing separately the proportions of beer, wine, and spirits from 1883 to 1902. To the amount of beer manufactured in the colony in each year on which excise duty was paid has been added the amount brought into consumption from imports:—

Year.	Beer.		Spirits.		Wine.	
	Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.
	Gal.	Gal.	Gal.	Gal.	Gal.	Gal.
1883	9·435	8·709	1·088	1·005	0·315	0·291
1886	7·861	7·333	0·820	0·765	0·212	0·198
1889	7·624	7·136	0·598	0·560	0·176	0·165
1892	7·807	7·328	0·708	0·664	0·174	0·163
1895	7·421	6·996	0·629	0·593	0·135	0·127
1898	8·427	7·995	0·668	0·634	0·146	0·139
1899	8·583	8·150	0·687	0·653	0·148	0·141
1900	9·150	8·696	0·720	0·684	0·152	0·145
1901	9·413	8·919	0·766	0·726	0·159	0·151
1902	9·252	8·777	0·755	0·716	0·158	0·150

A comparison of the annual consumption of beer, spirits, and wine per head in Australasia is added:—*

—	Beer.	Spirits.	Wine.	—	Beer.	Spirits.	Wine.
	Gal.	Gal.	Gal.		Gal.	Gal.	Gal.
Queensland ..	11·41	1·08	0·44	Western Australia	24·40	1·54	0·95
New South Wales	10·43	0·77	0·66	Tasmania ..	8·48	0·48	0·11
Victoria ..	12·16	0·76	1·62	New Zealand (including Maoris)	8·72	0·69	0·15
South Australia ..	9·06	0·43	1·72				

Tobacco.

The tobacco entered for consumption in 1902 was 1,969,285 lb., and the consumption per head of population, including Maoris, 2·34 lb.

Average Annual Consumption per Head of Tobacco in various Countries.*

	Lb.		Lb.
Holland	6·92	New Zealand	2·34
United States	4·40	Tasmania	2·13
Western Australia	4·39	Victoria	2·13
Turkey	4·37	Canada	2·11
Austria-Hungary	3·77	France	2·05
Denmark	3·70	South Australia	1·91
Switzerland	3·24	Sweden	1·87
Belgium	3·15	Spain	1·70
Germany	3·00	United Kingdom	1·41
Queensland	3·00	Italy	1·34
New South Wales	2·67	Russia	1·23

* See "The Seven Colonies of Australasia, 1901-1902."

Imports from Different Countries.

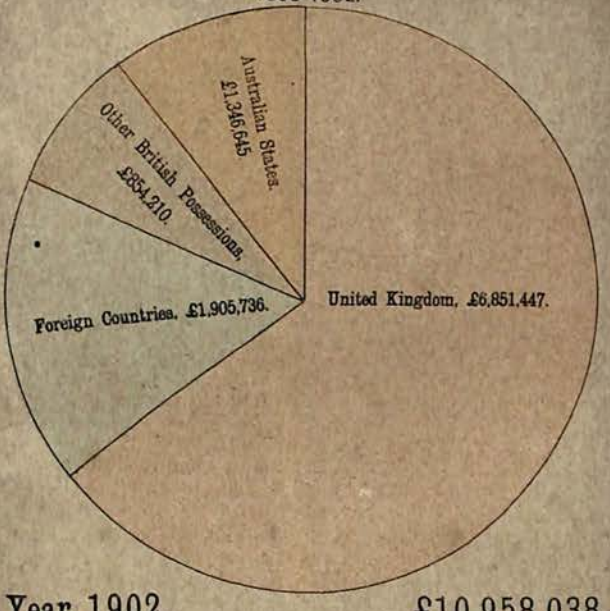
The imports from the United Kingdom to New Zealand in 1902 were valued at £6,851,452, or a decrease of £34,379 on the value of goods imported from the Home-country during the previous year. From British colonies and possessions the imports were £2,569,505, a decrease of £344,361 on the amount in 1901.

The following are the values of imports from different countries or places in 1902 and 1901, given in the order of the increase or decrease from each:—

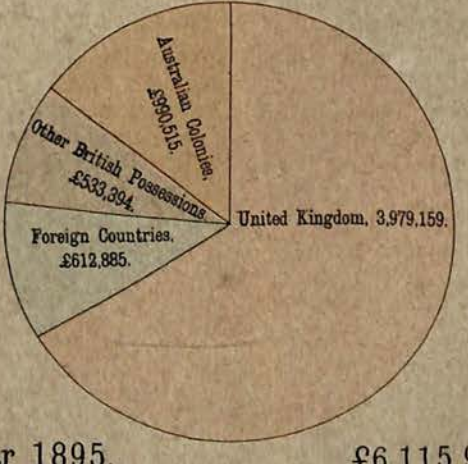
Country, Colony, State, &c.	1902. £	1901. £	Increase. £
Victoria	748,313	641,431	106,882
Belgium	86,236	63,083	23,153
Ocean Island	13,500	1,266	12,234
Germany	210,560	198,521	12,039
British Columbia	19,858	8,640	11,218
Japan	56,087	45,465	10,622
France	35,572	27,714	7,858
South Australia	47,135	39,319	7,816
Sweden	19,243	11,809	7,434
Western Australia	7,336	4,846	2,490

IMPORTS.

RISE IN VALUE OF IMPORTS TO NEW ZEALAND (EXCLUSIVE OF SPECIE), 1895-1902.



Year 1902. £10,958,038.



Year 1895. £6,115,953.

To face page 293.

Country, Colony, State, &c.	1902. £	1901. £	Increase. £
Italy	11,129	9,211	1,918
West Indies	3,019	1,517	1,502
Denmark	1,800	309	1,491
Burmah	2,234	1,072	1,162
Navigator's Island	3,597	2,692	905
Cape Colony	843	330	513
Hongkong	18,670	18,245	425
Friendly Islands	9,756	9,487	269
West Indies (British)	190	..	190
Norway	300	154	146
Turkey	136	..	136
New Guinea	82	..	82
Natal	135	56	79
Sandwich Islands	90	35	55
Portugal	600	552	48
Egypt	700	657	43
New Caledonia	23	..	23
Transvaal Colony	19	..	19
Russia	10	..	10
Norfolk Island	43	38	5

Country, Colony, State, &c.	1902. £	1901. £	Decrease. £
New South Wales	871,593	1,222,026	350,433
United States (West Coast)	172,362	240,515	68,153
Bengal	284,742	331,188	46,446
United Kingdom	6,851,452	6,885,831	34,379
Cook and Savage Islands	*	32,669	32,669
Java	55,005	83,416	28,411
United States (East Coast)	1,146,575	1,174,745	28,170
Fiji	327,972	349,706	21,734
Queensland	6,991	26,858	19,867
Malden Island	15,665	29,398	13,733
Tasmania	33,927	44,840	10,913
Ceylon	125,891	134,742	8,851
Philippine Islands	8,103	15,739	7,636
Society Islands	5,983	13,150	7,167
Holland	10,363	17,314	6,951
Greece	14,097	19,758	5,661
China	12,500	15,324	2,824
Singapore	23,113	25,538	2,425
Asia Minor	15,250	16,910	1,660
Surprise Island	8,206	9,242	1,036
Spain	988	1,650	662
Austria	1,655	2,316	661
Switzerland	2,198	2,650	452
Mauritius	..	442	442
Madras	872	1,084	212
Chesterfield Island	..	167	167
Canary Islands	41	149	108
Lord Howe Island	..	47	47
Bombay	447	475	28
New Hebrides	..	25	25
Canada	33,516	33,538	22
Aden	..	7	7
Argentine Republic	..	7	7

* The value of goods shipped from New Zealand to the Cook and other Islands lately annexed was, in 1902, £32,163.

The following table gives the value of the imports for each port in New Zealand for the last two years, arranged in order of magnitude for 1902 :—

	1902. £	1901. £
Wellington	3,124,771	3,046,707
Auckland	3,087,460	3,023,566
Dunedin	1,956,235	2,203,824
Lyttelton	1,745,273	2,072,186
Invercargill and Bluff ..	341,796	328,727
Napier	211,297	218,140
Timaru	148,033	176,967
Wanganui	134,158	153,679
Nelson	122,555	135,779
New Plymouth	81,488	73,631
Greymouth	69,514	74,842
Oamaru	51,426	55,393
Poverty Bay	39,902	49,745
Westport	35,218	32,254
Patea	17,227	16,038
Wairau	15,861	14,376
Hokitika	13,105	22,023
Kaipara	4,568	7,114
Tauranga	2,441	1,875
Picton	479	1,366

Imports, by Provincial Districts.

The values of imports in each provincial district during 1892 and 1902 were as under :—

	1892. £	1902. £
Auckland	1,667,499	3,134,371
Taranaki	43,269	98,715
Hawke's Bay	221,499	211,297
Wellington	1,607,053	3,258,929
Marlborough	18,254	16,340
Nelson	151,141	157,773
Westland	43,885	82,619
Canterbury	1,304,862	1,893,306
Otago	1,860,733	2,349,461

The value of imports by parcel-post (£24,861 in 1892 and £123,912 in 1902) must be added to the above figures in order to make up the totals (including specie) of £6,943,056 and £11,326,723 for the respective years.

Imports, North and Middle Islands.

Separating the value of the imports for the North Island from that of the Middle Island, it is found that while in 1892 the former received imported goods to the value of £3,539,320, against

£3,378,875 for the Middle Island, in the year 1902 the North Island imports exceeded those of the other to a far greater extent, the values being respectively £6,703,312 and £4,499,499, or an excess for the North Island of £2,203,813, or 48·98 per cent.

Details of all Articles of Import.

Details of all imports for 1902, giving quantities and values of articles introduced into the colony, with the amounts entered for Home consumption, and the amount of duty received, are next shown:—

General Imports into the Colony of New Zealand during the Year 1902.

(For rates of duty, see Tariff, pp. 85 to 101.)

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Acid—				
Acetic	382,481 lb.	3,982	464,000 lb.	2,899 19 9
Carbolic	34,715 "	651	..	..
Salicylic	4,446 "	306	..	..
Sulphuric	142,345 "	1,367	..	..
Tartaric	101,985 "	4,886	100,087 lb.	417 0 7
Unenumerated	95,609 "	1,719	..	..
Alkali—				
Potash and caustic potash	1,972 cwt.	3,021	..	..
Soda ash	12,395 "	4,411	..	..
Soda, carbonate and bicarbonate	15,737 "	5,311	15,487 cwt.	774 6 7
Soda, caustic	13,987 "	10,203	..	..
Soda crystals	46 "	19	46 cwt.	4 13 0
Soda silicate	4,189 "	1,578	..	..
Unenumerated	5,551 "	3,440	..	..
Alum	1,825 "	646	..	..
Animals, Living—				
Bears	2 No.	30	..	..
Birds	1,639 "	294	..	..
Cats	4 "	7	..	..
Cattle, horned	24 "	1,260	24 No.	12 0 0
Deer	24 "	154	..	..
Dogs	70 "	309	..	..
Donkeys	2 "	400	..	..
Goats	41 "	342	..	..
Hares	42 "	11	..	..
Horses	179 "	9,432	167 No.	167 0 0
Leeches	..	2	..	..
Mice	6 No.	3	..	..
Monkeys	4 "	15	..	..
Opossums	2 "	2	..	..
Pigs	8 "	40	..	..
Poultry	384 "	738	..	..
Rabbits	4 "	3	..	..
Sheep	933 "	7,904	..	..
Turtles	15 "	27	..	..
Apparel and slops n.o.e.	..	510,231	£507,026	126,756 8 1

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Apparel made to the order of residents in the colony	..	1,166	£1,172	468 14 7
Arms, ammunition, and explosives—				
Accoutrements ..	..	2,140	..	..
Caps, percussion ..	8,292,350 No.	1,142	..	..
Cartridges, 10- to 24-bore	5,126,681 „	16,602	5,096,800 No.	3,822 11 11
Cartridges n.o.e. ..	12,475,840 „	11,327	£7,086	1,417 3 3
Cartridge-cases ..	210,980 „	383	208,700 No.	78 5 8
Detonators for dynamite	..	1,577	..	..
Dynamite	87,250 lb.	5,007	..	..
Firearms	9,987 No.	15,535	£14,102	2,820 6 11
Fuse	138,187 coils	4,041	..	..
Lithofracteur and cordite	502,271 lb.	23,039	..	..
Ordnance stores ..	..	24,753	..	..
Powder, blasting ..	691,675 lb.	17,433	..	..
„ sporting ..	15,070 „	2,243	13,568 lb.	339 4 0
Shot	171 cwt.	451	166 cwt.	83 5 0
Swords	164 No.	258	..	..
Other explosives ..	15,740 lb.	840	..	..
Unenumerated ..	..	2,962	..	..
Asphalt..	57,833 cwt.	12,874	..	..
Bacon and hams ..	3,581 lb.	140	912 lb.	7 12 1
Bags and sacks—				
Cornsacks	596,267 doz.	124,231	..	..
Unenumerated ..	75,978 „	11,443	£2,887	577 10 0
Bagging and sacking ..	..	977	£34	5 2 0
Basketware and wickerware	..	3,024	£3,057	611 6 10
Beer	225,442 galls.	43,627	201,523 galls.	20,152 6 11
Belting, leather	32,564 lb.	3,778	31,195 lb.	519 18 5
„ other than leather	..	19,895	..	..
Beverages, non-alcoholic—				
Aerated and mineral waters	6,606 doz.	1,637	£1,728	345 13 0
Coffee essence ..	..	8,978	£8,354	1,670 17 1
Limejuice, sweetened ..	4,927 galls.	1,155	£1,264	252 17 0
„ unsweetened	12,579 „	2,085	..	..
Unenumerated ..	..	436	£477	119 3 7
Bicycles and tricycles ..	7,752 No.	52,633	£52,097	10,419 8 11
Materials for ..	..	81,544	£40,042	8,008 7 7
Biscuits—				
Fancy, and other kinds..	109,384 lb.	5,290	109,587 lb.	912 16 2
Ships', plain	28 cwt.	33	27 cwt.	4 0 7
Blacking	..	7,331	£7,397	1,479 7 2
Blacklead	..	2,660	£2,871	574 3 9
Blue	190,583 lb.	4,968	198,930 lb.	1,657 15 0
Boats	31 No.	836	..	..
Books, printed	..	149,194	..	..
Boots and shoes	89,802 doz. pr	192,794	£193,990	43,647 16 8
Gum-boots	1,002 „	10,137	..	..
Borax	2,624 cwt.	2,873	..	..
Brass—				
Pigs, bars, tubes, or sheets	813 „	3,157	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Brass—*continued.*		£		£ s. d.
Tubing or stamped work in the rough ..	126 cwt.	546	..	..
Manufactures	..	9,559	£9,635	1,927 1 10
Bricks—				
Building	88,200 No.	247	..	..
Fire	150,408 „	656	£656	131 5 8
Other kinds	38,048 „	113	..	..
Brushware and brooms—				
Brooms	2,566 doz.	1,666	£1,547	386 14 1
Brushes (clothes, hair, hat, and toilet) ..	..	8,253	£8,316	1,663 5 4
Unenumerated ..	..	6,685	£6,829	1,707 6 11
Materials for	..	6,675	..	..
Buckets and tubs—				
Iron	817 doz.	476	£463	115 13 2
Wood	222 „	107	£107	21 8 0
Building materials, unenumerated	..	7,303	..	..
Butter	31 cwt.	171	..	..
Candles	2,268,914 lb.	40,758	2,234,171 lb.	9,309 0 11
Canes and rattans ..	..	1,362	..	..
Canvas	..	39,202	..	..
Caramel, brewers' ..	16,107 lb.	242	15,967 lb.	199 11 9
„ cereal	192 „	3	192 „	0 8 0
Cards, playing	70,562 packs	1,361	65,894 packs	1,647 7 0
Carpeting and druggeting ..	..	43,347	£41,799	8,359 14 2
Carriages, &c.—				
Carriages	384 No.	9,592	£9,570	1,913 18 0
Carts, drays, and wagons	302 „	2,853	£2,880	576 0 0
Perambulators and go-carts	165 „	173	£173	34 12 0
Materials for	..	7,903	£7,965	1,593 1 1
Materials for axles, axle-arms, and boxes ..	..	17,538	..	..
Materials for carriage and cart shafts, spokes, and felloes in the rough ..	..	8,329	..	..
Carriage and cart makers' materials	..	15,525	..	..
Casks, empty	2,254 No.	2,963	£2,959	591 17 0
Cement	121,150 barrels	54,811	117,637 barrels	11,763 14 0
Chains and chain cables ..	7,174 cwt.	8,183	..	..
Charcoal	6,088 „	2,785	..	..
Cheese	31 „	137	£137	27 8 0
China, porcelain, and parian-ware	..	25,986	£26,072	5,214 7 11
Clocks	43,297 No.	13,011	£12,833	2,566 10 1
Coal	127,853 tons	125,732	..	..
Cocoa and chocolate ..	409,500 lb.	40,840	421,793 lb.	5,272 8 4
Cocoa beans	180,675 „	6,208	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Coffee—				
Raw .. .	220,878 lb.	8,217	..	..
Roasted	862 „	46	1,169 lb.	14 12 3
Coke	1,039 tons	2,597	..	..
Combs . ..	..	1,757	£1,741	348 3 1
Confectionery—				
Chocolate in plain trade packages	130,540 lb.	6,443	136,800 lb.	1,710 0 0
Chocolate, fancy packages	..	9,300	£9,392	1,878 6 7
Unenumerated ..	379,875 lb.	12,246	396,225 lb.	3,301 17 7
Copper—				
Nails	309 cwt.	1,301	..	..
Pig, bar, sheet, and tube	5,393 „	20,973	..	..
Rod and bolt	267 „	1,015	..	..
Sheathing	426 „	1,573	..	..
Manufactures	..	286	£286	57 4 0
Copra	58 tons	786	..	..
Cordage	4,978 cwt.	14,170	£14,126	2,805 5 2
Hawsers of 12 in. and over	470 „	781	..	..
Iron and steel	11,134 „	25,640	..	..
Cork, cut	..	10,405	£10,348	2,069 11 2
„ in the rough ..	68 cwt.	113	..	..
Cotton piece-goods—				
Butter and cheese cloth	..	3,232	..	..
Calico, white and grey ..	..	163,675	..	..
Corduroy, moleskin, and beaver-skin	..	3,139	..	..
Leather-cloth	..	6,134	..	..
Shirtings, coloured cotton	..	32,513	..	..
„ flannelette ..	..	4,332	..	..
„ union, of 6d. per yard and under ..	..	2,232	..	..
Tubular woven cotton cloth	..	7,447	..	..
Waterproof material ..	..	23,270	..	..
Unenumerated ..	..	252,511	£246,189	38,290 7 0
Cotton—				
Raw	8,443 lb.	159	..	..
Waste	4,335 cwt.	6,085	..	..
Wick	70,648 lb.	3,092	..	..
Cutlery	..	29,993	£31,204	6,024 14 2
Doors, plain	360 No.	194	360 No.	36 0 0
Drapery	..	277,513	£275,912	55,182 6 1
Lace and laces ..	..	52,516	£52,509	13,127 4 9
Ribbons and crape ..	..	18,422	£18,311	4,577 13 3
Tailors' trimmings ..	..	101,052	..	..
Drugs—				
Baking-powder and yeast preparations ..	..	179	£187	37 8 0
Chemicals n.o.e. ..	..	5,916	£5,878	881 15 4
Cream of tartar ..	877,034 lb.	31,200	850,991 lb.	3,545 15 11
Drugs, druggists' sundries, and apothecaries' wares	..	75,476	£75,697	11,354 11 1

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Drugs—*continued*—		£		£ s. d.
Glycerine, refined ..	..	1,859	£1,883	376 10 2
Tinctures and medicinal spirits	18,211 lb.	1,308	18,916 lb.	945 16 7
Washing-powder ..	..	238	£238	47 12 0
Anhydrous ammonia ..	..	6,586	..	..
Arsenic	1,924 cwt.	1,795	..	..
Disinfectants	..	5,209	..	..
Food preservative ..	..	4,565	..	..
Gums	..	2,319	..	..
Insecticides and tree-washes	..	1,608	..	..
Maltine	..	831	..	
Medicinal barks, leaves, &c.	..	1,594	..	..
Phosphorus	..	804	..	..
Potassium cyanide ..	9,674 cwt.	50,655	..	..
Sheep-dip	..	34,686	..	..
Sheep and horse drenches	..	459	..	..
Unenumerated ..	..	13,554	..	..
Dyes	..	16,531	..	..
Earthenware	..	66,975	£66,387	13,277 9 8
Eggs	12 doz.	15	..	..
Engine-packing	3,236 cwt.	11,138	..	..
Essences, flavouring—				
Spirituous	1,694 gals.	4,475	1,722 gals.	1,377 10 2
Unenumerated ..	..	170	£140	20 18 10
Essential oils—				
Eucalyptus	10,743 lb.	2,276	£2,392	478 8 0
Other kinds	32,163 „	5,027	..	..
Fancy goods and toys ..	..	148,072	£145,549	29,109 14 10
Felt sheathing	..	7,342	..	..
Fire-engines	159 No.	2,333	..	..
Fire-hose and other appliances	..	4,557	..	..
Fireworks	..	1,061	£919	183 15 6
Fish—				
Anchovies, salted ..	34 cwt.	63	..	..
Dried, pickled, and salted	2,872 „	5,448	2,713 cwt.	1,356 13 6
Potted and preserved ..	1,933,188 lb.	42,234	1,759,001 lb.	14,658 6 10
Fish-ova	..	667	..	..
Fishing-tackle—				
Artificial flies	..	237	£237	59 7 6
Fish-hooks	..	888	..	..
Unenumerated ..	..	4,290	£4,301	860 3 1
Flock	83 cwt.	83	83 cwt.	8 6 0
Floorcloth and oilcloth ..	..	74,556	£73,129	14,625 15 6
Flour	99,069 centals	39,446	93,212 centals	4,660 12 5
Foods, animal—				
Chaff	¼ ton	2	¼ ton	0 5 0
Unenumerated ..	..	1,892	£1,911	382 4 0
Foods, farinaceous—				
Arrowroot	46,027 lb.	615	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Foods, farinaceous—contd.				
Macaroni and vermicelli	137,355 lb.	1,847	..	..
Maizena and corn-flour..	1,025,940 „	12,326	965,216 lb.	1,005 8 8
Sago and tapioca ..	18,841 cwt.	10,421	..	..
Unenumerated ..	..	2,353	..	..
Fruits, bottled and preserved	43,517 doz.	11,075	£11,524	2,881 1 4
Fruits, dried—				
Currants	2,347,712 lb.	19,008	2,546,719 lb.	10,611 6 7
Raisins	2,441,590 „	38,169	2,504,405 „	10,435 0 5
Unenumerated ..	1,139,917 „	15,969	1,206,347 „	10,052 17 10
Fruits, fresh—				
Apples, pears, and plums	495,600 „	7,928	495,433 „	2,064 6 1
Apples and pears ..	575,312 „	5,342	575,312 „	1,198 11 4
Lemons	419,182 „	5,018	412,198 „	858 14 11
Other kinds	12,687,912 „	70,380	..	..
Lemon and orange peel, in brine	432,579 „	2,334	..	..
Preserved in sulphurous acid	7,186 „	83	7,186 lb.	29 18 10
Pulp and partially preserved fruit	6,753 „	60	6,753 „	42 4 1
Fungus	1 cwt.	5	..	..
Furniture and upholstery..	..	35,203	£35,279	8,819 13 3
Kapok	6,268 cwt.	21,767	..	..
Unenumerated ..	..	5,872	..	..
Furniture, knife, and plate powder and polish	..	5,328	£5,333	1,066 12 3
Furs	..	6,686	£6,688	1,672 1 10
Gelatine and isinglass ..	109,667 lb.	6,687	£6,558	1,311 10 5
Glass—				
Bottles, empty ..	..	40,959	..	..
Mirrors and looking-glasses	..	6,342	£6,376	1,593 17 10
Plate, bevelled, &c. ..	..	5,335	£5,293	1,323 6 5
„ other kinds ..	314,936 sup. ft.	9,348	£9,468	1,893 11 0
Window	3,417,142 „	31,866	3,401,850 sup. ft.	3,401 17 1
Glassware	..	45,058	£36,931	7,386 2 1
Glue and size	118,571 lb.	2,469	118,509 lb.	740 13 7
Gold-leaf	..	698	..	..
Grain and pulse—				
Barley	23 centals	17	7 centals	0 13 6
Beans and peas ..	1,229 „	670	1,229 „	46 1 8
Oats	1,429 „	431	39 „	1 9 8
Wheat	14,081 „	4,549	14,052 „	526 19 5
Unenumerated ..	4,099 „	2,806	4,091 „	153 8 6
Ground, unenumerated..	5,502 „	4,594	5,575 „	278 15 3
Grease	4,463 cwt.	3,494	£3,297	659 8 2
Grindery—				
Heel and toe plates ..	..	2,470	£2,471	556 0 6
Unenumerated ..	..	17,362	..	..
Haberdashery	..	20,466	£20,342	4,068 9 2
Buttons	..	30,635	..	..
Sewing-cottons, &c. ..	..	48,251	..	..
Unenumerated ..	..	3,217	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Hair	359 cwt.	1,284	..	..
Hardware, hollow-ware, and ironmongery ..	..	277,938	£274,124	54,824 15 11
Coffin furniture ..	..	2,147	£2,153	430 13 0
Hardware	..	3,227	..	..
Hats and caps	73,291 doz.	75,222	£74,261	18,565 7 3
Hatters' materials ..	..	18,896	..	..
Hemp	105 tons	4,793	..	..
Hides	11,252 No.	7,399	..	..
Honey	210 lb.	2	210 lb.	1 15 0
Hops	78,245 „	4,435	66,226 „	1,655 13 0
Hosiery	..	115,071	£115,118	23,023 13 3
Indiarubber and gutta-percha goods	..	8,888	£68	13 12 0
Ink—				
Printing	167,268 lb.	6,627	..	..
Writing	..	1,721	£1,385	277 0 10
Instruments, musical—				
Harmoniums and organs	542 No.	5,889	£5,779	1,155 14 0
Pianos	3,813 „	84,841	£86,383	17,276 12 1
Unenumerated ..	..	17,797	£18,154	3,630 15 8
For Volunteer bands ..	..	256	..	..
Materials for	..	1,880	£294	58 16 0
Instruments, other kinds—				
Optical	..	2,616	..	..
Scientific	..	4,165	..	..
Surgical and dental ..	..	23,969	..	..
Surveying	..	1,384	..	..
Unenumerated ..	..	177	..	..
Iron and steel—				
Angle	389 tons	3,065	..	..
Bar, bolt, and rod ..	12,432 „	118,032	..	..
Bolts and nuts ..	17,772 cwt.	19,431	..	..
Castings for ships ..	15 tons	967	..	..
Galvanised manufactures	..	920	£903	225 15 11
Hoop	1,695 tons	16,300	..	..
Hoop, galvanised ..	3,110 cwt.	2,143	3,107 cwt.	233 0 8
Pig	6,519 tons	29,462	..	..
Pipes and fittings ..	12,049 „	113,363	£112,783	5,639 3 0
Rails	9,846 „	62,735	..	..
Railway bolts and fastenings	2,436 „	22,428	£995	199 0 0
Sheet and plate ..	5,522 „	50,369	..	..
Sheet, galvanised, corrugated	277,967 cwt.	220,947	275,089 cwt.	27,508 18 5
Sheet, galvanised, plain	53,439 „	44,517	53,189 „	3,989 3 3
Staples and standards ..	1,105 tons	6,236	£6,180	1,236 0 4
Tanks	3,384 No.	10,054	3,343 No.	1,468 5 0
Wire, fencing, barbed ..	4,665 tons	61,009	..	..
Wire, fencing, plain ..	8,644 „	84,001	..	..
Wire, telegraphic and telephonic	106 „	1,624	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Iron and steel—*continued.*		£		£ s. d.
Wire-netting	..	32,648	..	..
Wire, unenumerated ..	896 tons	11,091	..	..
Unenumerated ..	38 „	102	..	..
Jams, jellies, and preserves	328,630 lb.	5,885	347,940 lb.	2,899 10 0
Jellies, concentrated ..	92,400 „	3,745	87,454 „	1,457 11 5
Jewellery	..	23,106	£21,192	4,238 8 6
Lamps, lanterns, and lamp-wick	..	22,300	£22,165	4,438 0 7
Lead—				
Pigs and bars	777 tons	9,522	..	..
Pipe	748 cwt.	764	744 cwt.	130 2 0
Sheet	19,726 „	15,009	17,687 „	1,326 10 5
Manufactures ..	..	307	£307	61 8 0
Leather..	417,272 lb.	63,139	370,675 lb.	2,387 11 7
Chamois	..	534	£521	104 3 5
Leather manufactures—				
Boot and shoe vamps, uppers, and laces ..	..	7,520	£7,488	1,684 17 10
Unenumerated ..	..	1,596	£1,686	358 4 4
Lighthouses materials ..	.. ..	560	..	..
Linen piece-goods—				
Forfar, dowlas, and flax sheeting	..	12,056	£1,833	366 12 0
Forfar, dowlas, &c., cut up under supervision..	..	..	£8,621	..
Linens n.o.e.	..	16,558	£16,063	3,212 13 0
Hessians and scrim ..	..	42,556	..	..
Linseed	8 tons	150	8 tons	8 6 9
Liquorice	..	3,006	£3,050	610 0 2
Machinery and machines—				
Agricultural	..	73,386	..	..
Ploughs and harrows..	..	11,518	..	..
Dairying	..	46,156	..	..
„ engines for ..	60 No.	2,990	£4,064	203 4 0
„ boilers for ..	52 „	2,892	£4,429	221 9 0
Dredging	..	9,677	£9,460	473 0 6
Electric	..	127,998	£86,142	8,614 4 0
Engines, steam ..	135 No.	20,635	£17,841	3,568 6 0
„ gas	587 „	39,355	..	..
„ boilers for ..	99 „	11,473	£8,712	1,742 8 0
Flour-milling	..	4,715	£4,452	222 12 3
Gas-making	..	23,865	£22,264	2,226 7 6
Mining	..	32,555	..	..
„ engines for ..	18 No.	1,620	£3,220	161 0 0
Paper-milling	..	495	£180	9 0 0
Portable and traction engines	64 No.	25,570	..	..
Printing	..	15,229	£14,620	731 0 6
Refrigerating	..	7,059	£4,502	225 1 6
Sewing and knitting ..	9,857 No.	37,005	..	..
Wood-working	..	15,708	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Machinery, &c.—*continued.*		£		£ s. d.
Woollen-milling ..	..	18,947	£15,832	791 12 0
Unenumerated ..	..	72,678	£53,283	9,953 13 0
Materials for and parts of	..	8,646	£1,561	258 13 0
Malt	3,693 bush.	1,101	3,694 bush.	369 7 9
Rice-malt	14,198 lb.	123	14,198 lb.	59 3 2
Manures—				
Bone-dust	14,026 tons	70,037	..	..
Guano	13,114 „	40,306	..	..
Unenumerated ..	12,590 „	44,621	..	..
Marble—				
Dressed and polished, and manufactures ..	..	7,193	£7,203	1,800 14 0
Hewn, or rough-sawn ..	280 tons	2,248	..	..
Matches and vestas—				
Wax .. (boxes)	59,432 gross	7,634	58,884 gross	3,454 19 5
Wooden .. „	34,440 „	2,660	34,816 „	1,781 4 4
Mats and matting ..	..	9,192	£9,132	1,826 7 3
Meats, potted and preserved	52,801 lb.	2,377	£2,165	433 1 8
Medicines, patent and proprietary	..	40,953	£38,544	5,781 13 1
Metal, manufactures—				
Japanned and lacquered metalware	..	1,198	£1,225	306 6 0
Unenumerated ..	..	15,956	£14,894	2,978 17 8
Weighbridges and weighing machines ..	..	3,253	£3,226	645 6 4
Anchors	829 No.	1,042	..	..
Rivets and washers ..	8,402 cwt.	8,335	..	..
Tacks	1,781 „	2,734	..	..
Type-writers	738 No.	10,690	..	..
Unenumerated ..	..	56,871	..	..
Metal sheathing, other than copper	347 cwt.	1,151	..	..
Milk, preserved	997,809 lb.	18,949	£17,170	4,292 9 8
Millinery—				
Feathers, ornamental ..	..	2,557	£2,535	633 14 9
Other kinds	..	43,144	£43,172	10,793 1 5
Minerals—				
Antimony-ore	4 cwt.	12	..	..
Mica	..	1	..	..
Mustard	195,914 lb.	11,124	200,162 lb.	1,668 0 4
Nails—				
Iron	76,808 cwt.	43,793	76,777 cwt.	7,677 13 9
Unenumerated ..	194 „	321	179 „	26 17 5
Nuts—				
Almonds, in shell ..	17,728 lb.	315	18,129 lb.	151 1 6
Almonds, shelled ..	32,861 „	2,582	30,280 „	378 9 11
Almonds, Barbary, &c. ..	126,333 „	4,847	..	..
Cocoa	48,560 No.	241	..	..
Unenumerated ..	70,713 lb.	1,066	69,041 lb.	575 6 10
Oakum	369 cwt.	446	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Oars	4,053 No.	662	..	..
Oils—				
Castor, bulk	138,085 galls.	17,628	94,878 galls.	2,371 19 0
Castor, bottled ..	1,787 doz. pt.	635	£656	98 8 5
Cod liver	8,921 galls.	1,990	..	..
Colza	13,477 „	2,005	12,612 galls.	315 6 0
Fish, penguin, and seal	31,477 „	3,198	..	..
Linseed	297,548 „	46,635	280,277 galls.	7,006 18 8
Mineral, kerosene ..	3,329,648 „	116,880	..	..
„ other kinds ..	236,097 „	18,459	205,820 galls.	5,145 10 0
Neatsfoot	471 „	45	471 „	11 15 6
Olive, bulk	9,307 „	1,715	9,176 „	229 7 10
Olive, bottled	3,053 doz. pts	1,553	£1,595	239 5 0
Unenumerated, bulk ..	280,588 galls.	28,682	259,042 galls.	6,476 1 0
Unenumerated, bottled	5,594 doz. pts	2,286	£2,467	370 0 3
Unenumerated ..	171,462 galls.	9,704	..	..
Oilmen's stores	.	7,314	£7,415	1,483 0 1
Onions	19,871 cwt.	7,264	19,444 cwt.	972 3 9
Opium	85 lb.	98	135 lb.	270 11 6
Paints and colours—				
Ground in oil	41,858 cwt.	49,506	40,475 cwt.	5,059 6 4
Mixed, ready for use ..	5,771 „	13,417	4,926 „	1,231 11 5
Unenumerated ..	12,921 „	13,782	..	..
Paper—				
Bags, coarse	23 „	24	23 cwt.	8 13 2
Bags, other kinds ..	2,914 „	4,731	£4,960	1,239 19 11
Butter-paper	3,372 „	6,255	..	..
Paperhangings ..	..	33,422	£33,639	5,045 17 11
Printing	117,128 cwt.	108,439	..	..
Wrapping	5,235 „	5,897	5,305 cwt.	1,326 8 5
Writing	11,572 „	20,051	..	..
Unenumerated ..	1,394 „	2,667	..	..
Peas, split	1,123 „	643	1,123 cwt.	112 6 11
Peel, candied and dried ..	19,469 lb.	381	18,271 lb.	228 7 9
Perfumery—				
Perfumed spirits ..	1,325 galls.	5,330	1,310 galls.	1,964 17 10
Toilet preparations ..	..	7,345	£7,153	1,788 6 4
Unenumerated ..	..	1,500	£1,476	369 2 5
Photographic goods ..	..	6,163	£5,996	1,199 2 10
Cameras and lenses ..	..	8,256	..	..
Copper, glass, and zinc plates for photo-lithographic purposes ..	..	903	..	..
Sensitised surfaces for photographic purposes	..	13,813	..	..
Pickles	6,421 galls.	1,673	5,986 galls.	897 16 10
Pictures, paintings, drawings, engravings, and photographs ..	..	7,155	£6,612	1,322 9 4
Family portraits ..	..	323	..	..
Paintings, &c., for museums, &c.	..	504	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and, ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Picture frames and mounts	..	1,275	£1,308	261 13 0
Pitch	2,833 cwt.	995	..	..
Plants, trees, and shrubs ..	..	4,302	..	..
Plaster of Paris	6,512 cwt.	1,242	..	..
Plate and plated ware ..	..	47,263	£48,150	9,629 18 11
Portmanteaux	..	5,264	£5,099	1,274 16 6
Leather and leather-cloth bags	..	29	£25	5 0 0
Potatoes	35½ tons	211	£153	30 12 0
Printing material—				
Stereotypes and matrices	..	61	£62	15 12 6
Type and materials, n.o.e.	..	12,655	..	..
Provisions n.o.e.	..	7,745	£7,641	1,528 2 3
Pumps	..	7,991	£4,594	918 15 3
Putty	4,602 cwt.	2,369	4,607 cwt.	460 14 6
Quicksilver	11,678 lb.	1,490	..	..
Rags	61 cwt.	237	..	..
Railway plant—				
Locomotives	5 No.	11,831	..	..
Unenumerated ..	..	110,472	£5,284	1,056 16 0
Resin	16,286 cwt.	5,562	..	..
Rice	63,548 „	38,964	..	..
Rice-flour	101 „	82	103 cwt.	30 18 4
Rugs	..	12,872	£12,687	2,537 6 7
Saccharine	11,733 oz.	338	8,217 oz.	617 16 3
Saddlery and harness ..	..	30,697	£30,810	6,162 0 8
Harness and oil-composition	..	2,460	£2,300	459 18 9
Saddlers' ironmongery and materials	..	21,104	..	..
Collar-check	..	5,331	..	..
Salt	15,972 tons	34,885	..	..
Rock	421 „	962	..	..
Saltpetre	266 „	1,736	..	..
Sashes, plain	6 pairs	37	6 pairs	0 12 0
Sauces	12,769 gals.	8,925	12,076 galls.	2,415 3 2
Sausage-skins	216,696 lb.	11,150	192,516 lb.	2,406 9 0
Seeds—				
Grass and clover ..	17,317 cwt.	46,626	..	..
Unenumerated ..	..	24,094	..	..
Shale	399 tons	1,192	..	..
Shells	99 cwt.	365	..	..
Ship-chandlery	..	6,658	..	..
Silks	..	139,522	£137,634	34,408 9 6
For flour-dressing ..	..	155	..	..
Silver	2,362 oz.	322	..	..
Skins and pelts—				
Fur-skins	3,008 No.	108	..	..
Kangaroo and wallabi ..	3,971 „	105	..	..
Unenumerated ..	19,817 „	2,316	..	..
Slates, roofing	174,887 „	1,608	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Soap—				
Common	6 cwt.	11	6 cwt.	1 11 3
Soap powder, extract of soap, &c.	..	6,422	£6,419	1,283 17 7
Unenumerated ..	..	27,518	£27,074	6,768 10 9
Specie—				
Gold	..	346,030	..	..
Silver	..	21,402	..	..
Copper	..	1,253	..	..
Specimens illustrative of natural science ..	..	359	..	..
Spices—				
Ground	23,974 lb.	955	19,389 lb.	323 3 0
Unground	457,377 „	14,006	458,802 „	3,823 7 1
Spirits—				
Bitters and liqueurs ..	3,106 galls.	3,271	3,302 galls.	2,641 8 6
Brandy	75,562 „	31,385	71,783 „	57,426 4 8
Geneva and gin, unsweetened	78,562 „	19,572	67,210 „	53,767 17 8
Methylated	1,423 „	177	1,423 „	71 3 0
Rum	17,794 „	3,149	18,747 „	14,997 15 2
Sweetened	6,243 „	1,821	7,388 „	5,910 1 3
Whisky	459,480 „	165,803	427,827 „	342,261 7 11
Unenumerated ..	2,375 „	1,647	2,291 „	1,833 0 4
Spirits of wine	47,332 „	3,214	1,753 „	1,402 3 9
Methylated, in bond ..	..	..	43,034 „	1,075 17 3
Sponges	..	272	£198	29 13 6
Starch	811,476 lb.	8,937	874,601 lb.	7,288 6 10
Moulding	4,480 „	37	..	..
Stationery—				
Manufactured	..	49,375	£41,343	10,335 16 5
Unenumerated ..	..	36,232	£35,990	7,198 1 10
Apparatus for teaching ..	..	4,710	..	..
Bookbinders' materials ..	..	6,006	..	..
Cardboard-boxes, materials for ..	..	10,577	..	..
Unenumerated ..	..	5,776	..	..
Stearine	112 lb.	3	112 lb.	0 14 0
For match-making ..	247,417 „	5,948	258,208 „	806 18 0
Stone—				
Building	4,419 tons	8,248	..	..
Flagging	5 „	23	..	..
Granite and other stone, dressed, or polished ..	..	3,826	£3,826	956 10 0
Granite, unwrought ..	1 ton	6	£6	0 6 0
Grind-, mill-, oil-, and whet-stones	..	2,429	..	..
Sugar—				
Raw	630,260 cwt.	341,410	..	..
Refined	74,598 „	56,112	84,878,074 lb.	176,829 6 5
Glucose	6,855 „	4,467	762,309 „	3,176 5 9
Molasses and treacle ..	166 „	149	2,629,932 „	5,479 0 6
Molasses and treacle, mixed with bone-black	192 „	25	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Sulphur	5,667 cwt.	1,760	..	..
Tanning materials—				
Crude bark	4,348 tons	38,465	..	..
Other kinds	..	4,771	..	..
Tar	..	2,118	..	..
Tarpaulins and tents ..	..	461	£461	92 4 0
Tea	5,210,375 lb.	197,127	5,088,581 lb.	42,404 16 9
Textile piece-goods other than silk, cotton, linen, or woollen	..	18,109	£17,134	3,426 17 5
Articles made up from, other than apparel ..	..	11,439	£11,192	2,797 18 11
Timber—				
Laths and shingles ..	547,249 No.	552	547,249 No.	54 14 6
Logs	1,906 „	9,122	..	..
Logs, hewn	5,355,357 sup. ft.	65,631	..	..
Palings	498,095 No.	3,118	498,095 No.	498 1 9
Posts	11,281 „	413	11,281 „	45 2 5
Rails	3,615 „	115	3,615 „	7 5 1
Sawn, undressed ..	7,045,373 sup. ft.	65,154	5,448,800 sup. ft.	5,448 16 0
Sawn, dressed	69,057 „	1,577	69,057 „	138 2 4
Unenumerated ..	..	879	..	..
Tin—				
Block	2,944 cwt.	18,468	..	..
Foil	21,704 lb.	1,108	..	..
Sheet	59,620 cwt.	52,185	..	..
Tinware	..	12,275	£12,272	3,067 18 10
Tinsmiths' furnishings and fittings	..	1,754	..	..
Tobacco—				
Unmanufactured ..	49,929 lb.	2,417	42,580 lb.	4,258 0 0
Manufactured	1,759,636 „	137,990	1,657,223 „	290,014 4 9
Cigars	79,447 „	27,312	78,453 „	27,458 10 4
Cigarettes	183,855 „	44,692	76,152,000 No.	66,632 16 3
			10,380 oz.	259 10 0
Snuff	2,121 „	223	1,832 lb.	641 4 0
Tobacco-pipes and cases, &c.	..	24,550	£24,665	6,166 5 0
Tools and implements—				
Axes and hatchets ..	..	10,670		
Engineers' machine tools	..	25,336	..	..
Scythes	..	1,455	..	..
Sheep-shears	..	2,685	..	..
Spades, shovels, and forks	..	13,654	..	..
Unenumerated ..	..	88,278	..	..
Tramway plant	..	24,917	..	..
			£24,065	4,813 0 0
Turpentine, driers, and terebine	109,040 galls.	14,492	..	..
Twine	473,259 lb.	15,538	£14,014	2,082 16 0
Binder	83 cwt.	274	..	..
Nets and netting ..	..	1,302	£1,344	268 18 0
Unenumerated ..	..	270	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Umbrellas and parasols	..	18,574	£18,646	3,729 5 2
Materials for	..	3,473	..	..
Varnish and gold-size	36,931 galls.	18,500	35,313 galls.	3,531 6 10
Vegetables, fresh, dried, and preserved	..	1,357	£1,153	230 12 1
Vinegar	58,635 galls.	6,628	59,032 galls.	1,475 15 10
Watches	31,706 No.	18,009	£18,218	3,643 11 4
Watchmakers' materials	..	554	..	..
Wax—				
Beeswax	74 cwt.	486	..	..
Paraffin	1,262,720 lb.	14,903	1,262,700 lb.	3,945 18 9
Unenumerated	2,074 „	66	1,762 „	11 0 3
Whiting and chalk	10,825 cwt.	1,168	10,825 cwt.	541 4 9
Wine—				
Australian	52,350 galls.	18,376	54,475 galls.	13,618 14 4
Sparkling	11,422 „	21,391	10,225 „	4,601 8 3
Other kinds	59,133 „	20,583	61,747 „	18,524 4 0
Woodenware	..	40,947	£32,001	5,545 9 8
Wool—				
Greasy	80,456 lb.	4,003	..	..
Scoured	17,012 „	910	..	..
Washed	784 „	10	..	..
Woollen piece-goods	..	363,798	£367,412	73,482 9 10
Blankets	21,587 pairs	8,736	£8,621	1,724 5 6
Woolpacks	26,598 doz.	31,568	..	..
Woolpockets	784 „	394	..	..
Yarns	..	7,627	£7,667	1,533 8 0
Coir, flax, and hemp	..	6,620	..	..
Zinc manufactures—				
Tiles, ridging, &c.	..	148	£148	29 12 0
Unenumerated	..	69	£66	16 10 0
Perforated sheet	491 cwt.	979	..	..
Plain sheet	6,860 „	8,441	..	..
Spelter	5,675 „	5,926	..	..
Minor articles	..	7,900	..	..
Articles and materials suited only for and to be used solely in the fabrication of goods in the colony	..	20,622	..	..
Materials for cartridge-making	..	6,872	..	..
Miscellaneous goods—				
Manufactured	..	15,137	..	..
Unmanufactured	..	4,733	..	..
Vanilla beans	10,431 lb.	1,947	..	..
Parcels-post	..	123,912	..	22,737 7 5

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1902—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
EXCISE DUTIES.		£		£ s. d.
Tobacco, manufactured ..	..	..	..	2,095 12 0
Cigars	..	..	..	177 10 6
Cigarettes made by hand ..	..	..	..	11 17 0
Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing more than 50 per cent. of proof spirit	..	..	..	2,248 3 7
Pharmacopœia tinctures, &c., containing less than 50 per cent. of proof spirit	..	..	..	16 17 11
Culinary and flavouring essences	..	..	..	182 18 10
Perfumed spirits.. ..	..	..	..	5 0 0
Toilet preparations ..	..	..	..	0 18 0

The Cook and Savage Islands, now part of New Zealand, have not been considered in the table of imports made up by the Department of Trade and Customs. Details of goods received from those islands in 1902 are given on page 295.

CUSTOMS REVENUE.

The Customs and excise duties received during the last five years are shown in detail, also the rate of revenue per head of mean population, inclusive and exclusive of Maoris, for each year:—

—	1898.	1899.	1900.	1901.	1902.
CUSTOMS DUTIES.	£	£	£	£	£
Spirits	395,513	414,395	442,090	478,816	483,582
Wine	31,138	32,045	33,614	35,864	36,745
Ale, Beer, &c.	19,158	17,594	17,562	18,849	20,152
Cigars, Cigarettes, and Snuff	71,430	77,810	82,357	90,490	94,992
Tobacco	257,516	263,057	279,651	296,016	294,272
Tea	78,676	79,975	68,960	45,905	42,405
Coffee, Cocoa, &c... ..	5,463	6,968	5,285	4,647	5,288
Sugar and Molasses ..	154,355	162,787	168,876	173,055	185,484
Opium	5,501	6,139	6,426	6,618	*271
Other Goods by Weight ..	187,758	192,987	178,554	151,286	166,687
„ *ad valorem* ..	637,506	682,722	775,649	808,531	867,209
Other Duties	105,987	91,155	94,687	59,316	65,219
Parcels-post	11,725	14,368	16,643	22,405	22,737
Totals, Customs Duties	1,961,726	2,042,002	2,170,354	2,191,798	2,285,043

* See remarks on page 317.

CUSTOMS REVENUE—*continued.*

—	1898.	1899.	1900.	1901.	1902.
EXCISE DUTIES.	£	£	£	£	£
Tinctures—New Zealand ..	*1,244	†2,036	‡1,638	§2,198	‖2,454
Cigars, Cigarettes, and Snuff —New Zealand-manufactured	152	91	129	174	190
Tobacco — New Zealand-manufactured	2,282	2,323	2,376	2,596	2,096
Beer—New Zealand ..	75,164	78,265	85,141	89,185	89,742
Totals, Excise Duties ..	78,842	82,715	89,284	94,153	94,482
Revenue from Customs Duties per head of mean population (excluding Maoris) ..	£ s. d. 2 13 3	£ s. d. 2 14 5	£ s. d. 2 16 10	£ s. d. 2 16 4	£ s. d. 2 17 3
Ditto (including Maoris) ..	2 10 6	2 11 8	2 14 0	2 13 5	2 14 4
Revenue from Excise Duties per head of mean population (excluding Maoris ..	0 2 1·7	0 2 2·5	0 2 4	0 2 5	0 2 4·4
Ditto (including Maoris) ..	0 2 0·4	0 2 1·1	0 2 2·7	0 2 3·5	0 2 3

* Including £89 excise duty on culinary and flavouring essences. † Including £149 excise duty on culinary and flavouring essences, and £11 on perfumed spirits. ‡ Including £89 excise duty on culinary and flavouring essences. § Including £173 duty on culinary and flavouring essences, and £19 on perfumed spirits. ‖ Including £183 excise duty on culinary and flavouring essences, £5 perfumed spirits, and £1 toilet preparations.

The Customs revenue for the year 1902 amounted to £2,285,043, and the excise duties to £94,482. The revenue from Customs was £2 17s. 3d. per head of population excluding Maoris, and £2 14s. 4d. if they be included. In 1888 the Customs revenue was £2 6s. 2d. per head of European population, and from that time the proportion increased slowly year by year until 1892, when it reached £2 11s. 6d. per head. During the next two years there was a falling-off; but 1895 and following years, except for a slight fall in 1901, show increases, the proportion for 1902 being higher than in any year since 1882. Details for thirteen years are given :—

CUSTOMS REVENUE PER HEAD OF EUROPEAN POPULATION.

	£ s. d.		£ s. d.
1890	2 9 3	1897	2 13 0
1891	2 9 7	1898	2 13 3
1892	2 11 6	1899	2 14 5
1893	2 10 4	1900	2 16 10
1894	2 6 4	1901	2 16 4
1895	2 6 9	1902	2 17 3
1896	2 9 11		

Dating from 1890, the taxation by way of Customs and excise duties together increased from £2 11s. 2d. in that year to £2 11s. 11d. in 1896, to £2 15s. 1d. in 1897, to £2 15s. 5d. in 1898, to £2 16s. 8d. in 1899, to £2 19s. 2d. in 1900, declined to £2 18s. 9d. in 1901, increasing again to £2 19s. 7d. in 1902.

There was an alteration of tariff in 1895 in certain items, but the amount of duty paid in 1902 bears a lesser proportion to the

total value of imports (less specie) for that year than the duty paid in 1894, prior to the new tariff, to the imports of that year.

In the year 1900 certain duties were lowered and exemptions granted. Tea is now charged only 2d. per pound, instead of 4d.; currants and raisins are lowered to 1d. per pound; candles are 1d.; cocoa and roasted coffee, 3d. There is also reduction on stearine for match-making, on paraffin-wax, and wax matches. Patent and proprietary medicines bear 15 per cent. duty, also certain drugs and chemicals. Steam-engines, or parts thereof, are charged 5 per cent. The new exemptions are various.

With these circumstances there has been a greater import of taxable articles, which would seem to indicate that purchasing power had increased. It is at least certain that the value of imports rose from £5,990,177 (excluding specie), in 1894, to £10,958,038 in 1902, while the changes of tariff were being effected.

The tariff has been given in full in this book (see pages 85 to 101). The rates of duty levied include 16s. per gallon on spirits; 30s. per gallon on perfumed spirits; 7s. per pound on cigars and snuff; 17s. 6d. per 1,000 of 2½lb. and under, and 6d. per ounce weight over 2½lb. per 1,000, on cigarettes; 3s. 6d. per pound on manufactured and 2s. on unmanufactured tobacco. Sparkling wine is charged 9s. a gallon; Australian, 5s.; other kinds, 6s.; ale and beer, 2s. The duty on tea is 2d. the pound; on cocoa, chocolate, and chicory, 3d.; raw coffee, 2d.; roasted, 3d. Sugar, molasses, and treacle pay ½d., and glucose 1d. per pound. Opium is charged 40s. per pound, but this article, in a form suitable for smoking, cannot now be legally imported. The Opium Prohibition Acts, 1901 and 1902, make the importation or possession of opium suitable for smoking illegal. The remainder of the Customs revenue, with small exception, is made up of charges on goods by weight, *ad valorem* duties, ranging from 5 to 40 per cent., and receipts from the foreign parcels-post. There is also an excise duty of 1s. per pound on tobacco; 1s. 6d. per pound on cigars, cigarettes, and snuff; 3d. per gallon on beer; 9d. per pound on tinctures, &c., manufactured in the colony, containing more than 50 per cent. of proof spirit, and 3d. per pound when less than 50 per cent. Also, 12s. per gallon on culinary flavouring-essences; and 20s. on perfumed spirits.

By "The Tobacco Excise Duties Act, 1896," the excise duty on cigarettes made in the colony is now (from the 31st December, 1896) 2s. 6d. per pound on machine-made and 1s. per pound on hand-made cigarettes.

"The Tobacco Act Amendment Act, 1896," enacts that all packages of manufactured tobacco shall be labelled before leaving the manufactory, and provides for the issue of warrants to use cutting-machines for cutting duty-paid manufactured tobacco for sale (or to be used in the manufacture of cigarettes by hand), and to manufacture cigarettes by hand, under certain conditions.

The duties authorised by "The Timber Export Act, 1901," will be found given on page 100 in detail with the full tariff.

SECTION XVI.—EXPORTS AND TOTAL TRADE.

THE value of all the exports in 1902, exclusive of horses and forage sent to South Africa with the New Zealand Contingents, but inclusive of specie (£9,518), was £13,644,977; the value of New Zealand produce exported, £13,498,599: an average of £16 18s. 5d. per head of population, against £16 6s. 3d. for the previous year. The increase in the value of exports of New Zealand produce for 1902 in respect of that for 1901 amounts to £808,139, or 6·37 per cent.

The values of exports for the years 1892 and 1902 to the United Kingdom, the Australian States, with other British possessions, and to foreign countries, show the extent and development of outward trade in regard to its distribution:—

Countries.	1892. £	1902. £
United Kingdom	7,483,618	9,450,648
New South Wales	699,933	1,118,193
Victoria	520,646	1,295,233
Queensland	52,944	62,988
Western Australia	32,949	132,907
South Australia	31,695	34,033
Tasmania	29,147	40,996
Other British possessions (excluding Hongkong, Norfolk Island, and Fiji)	4,426	763,887
China (including Hongkong)	4,109	66,396
United States	520,797	489,964
Other foreign ports	154,587	189,732
	£9,534,851	£13,644,977

A comparative table showing the values of New Zealand domestic exports, according to their nature, for fifteen years will be found further on, with comments. The continuous rise observed from 1895 to 1900 was, as remarked last year, arrested in 1901, but the decline in that year is more than balanced by the large increase in 1902, which shows the highest value of goods exported yet recorded in the annals of the colony.

But first a comparative statement of exports according to value for the last two years is given, showing the amounts for various principal articles, being the produce or manufacture of the colony, classified in groups:—

	Year 1901.	Year 1902.	Increase in 1902.	Decrease in 1902.
	£	£	£	£
THE MINE.				
Coal	142,176	154,747	12,571	..
Gold	1,753,784	1,951,426	197,642	..
Silver and minerals	74,003	77,038	3,035	..
Total	1,969,963	2,183,211	213,248	..
THE FISHERIES.				
Fish	17,851	16,015	..	1,836
Oysters	3,201	2,867	..	334
Other	965	1,542	577	..
Total	22,017	20,424	..	1,593
THE FOREST.				
Fungus	12,453	10,257	..	2,196
Kauri-gum	446,114	450,223	4,109	..
Timber—				
Sawn and hewn	294,699	208,005	..	86,694
Other	1,191	2,477	1,286	..
Total	754,457	670,962	..	83,495
ANIMALS AND PRODUCE.				
Bacon and hams	17,732	18,590	858	..
Beef and pork (salted) ..	10,225	9,837	..	388
Butter	882,406	1,205,802	323,396	..
Cheese	238,685	163,539	..	75,146
Hides	43,470	44,546	1,076	..
Live-stock	16,518	113,959	97,441	..
Preserved meats	87,683	123,534	35,851	..
Frozen meat	2,253,262	2,718,763	465,501	..
Rabbit-skins	57,046	52,566	..	4,480
Sausage-skins	39,498	61,167	21,669	..
Sheepskins and pelts	264,579	375,876	111,297	..
Tallow	351,710	550,131	198,421	..
Wool	3,699,103	3,354,563	..	344,540
Other	7,280	11,995	4,715	..
Total	7,969,197	8,804,868	835,671	..
AGRICULTURAL PRODUCTS.				
Bran and sharps	15,294	39,523	24,229	..
Chaff	92	1,705	1,613	..
Flour	8,495	3,613	..	4,882
Grain—				
Barley	13,241	25,062	11,821	..
Beans and peas	26,028	22,097	..	3,931
Maize	15,085	40,417	25,332	..
Malt	32,252	705	..	31,547
Oats	922,301	666,664	..	255,637
Wheat	276,111	31,074	..	245,037
Hops	17,189	14,292	..	2,897
Oatmeal	27,591	21,578	..	6,013
Potatoes	90,658	72,807	..	17,851
Seeds (grass and clover) ..	69,937	84,861	14,924	..
Other	18,112	21,588	3,476	..
Total	£1,532,386	£1,045,986	..	£486,400

	Year 1901.	Year 1902.	Increase in 1902.	Decrease in 1902.
	£	£	£	£
MANUFACTURES.				
Apparel	7,227	2,267	..	4,960
Leather	112,400	92,636	..	19,764
Phormium (New Zealand hemp)	195,728	534,031	338,303	..
Woollen manufactures ..	13,759	6,664	..	7,095
Other manufactures	96,028	119,634	23,606	..
Total	425,142	755,232	330,090	..
Miscellaneous	17,298	17,916	618	..
Total exports (colonial produce and manufactures) ..	12,690,460	13,498,599	808,139	..
Specie	11,614	9,518	..	2,096
Other exports (British and foreign)	179,350	136,860	..	42,490
Total exports ..	£12,881,424	£13,644,977	£763,553	..

The class designated "Animals and Produce" shows by far the greatest value, the sum for 1902 being £8,804,868, which includes £3,354,563 for wool and £2,718,763 for frozen meat. The total value of exports in this class increased during the year by £835,671, on a total of £7,969,197 in 1901.

Although the value of wool exported in 1902 is less than that for the previous year, the quantity will be found greater.

"The Mine" takes second place among the classes for total value, with an export of coal, gold, silver, and other minerals amounting to £2,183,211 for 1902, being an increase of £213,248 on £1,969,963, the export for the previous year.

"Agricultural Products," principally grain, potatoes, and seeds, take third place, but show a decrease of £486,400 on the value exported in 1901, oats and wheat falling off considerably.

"The Forest" shows an export for last year valued at £670,962, which gives a decrease of £83,495 on the figures for the previous year, timber being accountable for nearly the whole shortage.

"Manufactures" are set down at £755,232 in 1902, being £330,090 more than in the previous year. Phormium shows the remarkable increase on the operations for 1901 of £338,303. Woollen manufactures sent abroad decreased by £7,095, and leather by £19,764.

The smallest group in respect to value is "The Fisheries." The total for the group was £20,424 last year.

The exports of New Zealand produce or manufacture for the two last years have also to be considered in relation to quantity, and the articles are again grouped in the next table according to the same classification as that used for purposes of comparing the values.

QUANTITIES OF THE PRINCIPAL ARTICLES OF NEW ZEALAND PRODUCE EXPORTED.

Items.	Year 1901.	Year 1902.	Increase in 1902.	Decrease in 1902.
The Mine:—				
Coal .. .. Tons	159,643	188,677	29,034	..
Gold .. .. Oz.	455,558	507,852	52,294	..
Silver .. .. "	571,134	674,196	103,062	..
Minerals .. .. Tons	945	607	..	338
The Fisheries:—				
Fish .. .. Cwt.	11,020	9,611	..	1,409
Oysters .. .. Doz.	383,680	339,685	..	43,995
Whalebone .. Lb.	1,232	1,680	448	..
The Forest:—				
Fungus .. .. Cwt.	5,902	4,632	..	1,270
Gum (kauri) .. Tons	7,541	7,430	..	111
Timber (sawn and hewn) Ft.	71,822,369	49,251,549	..	22,570,820
Animals and Produce:—				
Bacon and hams .. Cwt.	5,500	5,910	410	..
Beef and pork (salted) "	8,281	8,020	..	261
Butter .. .. "	201,591	253,998	52,407	..
Cheese .. .. "	104,294	74,746	..	29,548
Hides .. .. No.	47,875	45,038	..	2,837
Live-stock (cattle, horses, sheep, pigs) "	4,298	52,743	48,445	..
Meats (preserved) .. Cwt.	35,258	54,271	19,013	..
" (frozen) .. "	1,857,547	2,138,557	281,010	..
Sausage-skins .. "	9,133	13,398	4,265	..
Skins (rabbit) .. No.	7,112,008	6,139,794	..	972,214
" (sheep) and pelts "	4,601,531	6,144,680	1,543,149	..
Tallow .. .. Cwt.	335,360	424,060	88,700	..
Wool .. .. Lb.	146,820,079	160,419,023	13,598,944	..
Agricultural Products:—				
Bran and sharps .. Tons	4,754	7,737	2,983	..
Chaff .. .. "	28	356	328	..
Flour .. .. "	1,305	370	..	935
Grain, barley .. Bush.	119,779	151,360	31,581	..
" beans and peas "	166,184	102,314	..	63,870
" maize .. "	124,447	225,829	100,382	..
" malt .. "	141,324	2,865	..	138,459
" oats .. "	10,514,924	5,185,812	..	5,329,112
" wheat .. "	2,301,092	194,671	..	2,106,421
Hops .. .. Cwt.	4,298	4,311	13	..
Oatmeal .. .. Tons	3,323	1,804	..	1,519
Potatoes .. .. "	22,062	17,715	..	4,347
Seeds (grass and clover) Bush*	294,347	246,389	..	47,958
Manufactures:—				
Ale and beer .. Gals.	19,449	25,892	6,443	..
Cordage .. .. Cwt.	647	820	173	..
Leather .. .. Cwt.	18,281	15,469	..	2,812
Phormium (New Zealand hemp) .. Tons	10,171	20,852	10,681	..
Soap .. .. Cwt.	6,014	5,770	..	244

* At 20 lb. to the bushel.

The numerical increases in such articles as butter, wool, coal, silver, gold, live-stock, frozen and preserved meat, tallow, sheep-

skins and pelts, barley, maize, beer, and phormium, are all most satisfactory, and in some cases very considerable; while, on the other hand, the export of timber, cheese, rabbitskins, malt, wheat, and oats, with some other items, declined in 1902. The rates of increase and decrease for the principal articles are exhibited in the table following:—

INCREASES.

Export of		Rate of Increase per Cent. in 1902 over Quantity in 1901.	Export of		Rate of Increase per Cent. in 1902 over Quantity in 1901.
Chaff	Tons	Over 100	Cordage	Cwt.	26·74
Live-stock	No.	"	Tallow	Cwt.	26·45
Phormium	Tons	105·01	Barley	Bush.	26·37
Maize	Bush.	80·66	Butter	Cwt.	26·00
Bran and sharps	Tons	62·75	Coal	Tons	18·19
Meats (preserved)	Cwt.	53·93	Silver	Oz.	18·04
Sausage-skins	Cwt.	46·70	Meat (frozen)	Cwt.	15·13
Whalebone	Lb.	36·36	Gold	Oz.	11·48
Sheepskins and pelts	No.	33·54	Wool	Lb.	9·26
Ale and beer	Gals.	33·13	Bacon and hams	Cwt.	7·45
			Hops	Cwt.	0·30

DECREASES.

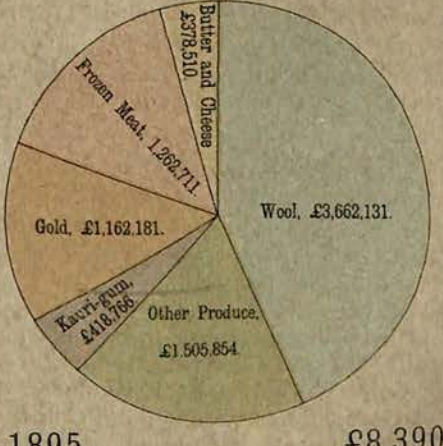
Export of		Rate of Decrease per Cent. in 1902 over Quantity in 1901.	Export of		Rate of Decrease per Cent. in 1902 over Quantity in 1901.
Malt	Bush.	97·97	Seeds	Bush.	16·29
Wheat	Bush.	91·54	Leather	Cwt.	15·38
Flour	Tons	71·65	Rabbitskins	No.	13·67
Oats	Bush.	50·68	Fish	Cwt.	12·79
Oatmeal	Tons	45·71	Oysters	Doz.	11·47
Beans and peas	Bush.	38·43	Hides	No.	5·93
Minerals	Tons	35·77	Soap	Cwt.	4·06
Timber	Ft.	31·43	Beef and pork (salted)	Cwt.	3·15
Cheese	Cwt.	28·33	Gum (Kauri)	Tons	1·47
Fungus	Cwt.	21·52			
Potatoes	Tons	19·70			

The position as to value in respect of a period of fifteen years, 1888 to 1902 inclusive, is presented in a table giving the domestic exports for each. The most important items of export given under the heading "Other New Zealand Produce" are coal, silver, minerals, fish, oysters, fungus, kauri-gum, timber, bacon and hams, salted and preserved meats, tallow, sheep and rabbit skins, hides, sausage-skins, and live-stock. The aggregate value of these in 1902 was £2,274,377.

EXPORTS.

RISE IN VALUE OF EXPORTS OF NEW ZEALAND PRODUCE, 1895-1902.

Year 1902. £13,498,599.



Year 1895. £8,390,153.

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EXPORTS OF NEW ZEALAND PRODUCE.

Calendar Year.	Wool.	Gold.	Frozen Meat.	Butter and Cheese.	Agricultural Produce.	Manufactures	Other N.Z. Produce.	Total.
	£	£	£	£	£	£	£	£
1888	3,115,098	914,309	628,800	197,170	905,907	233,383	1,260,461	7,255,128
1889	3,976,375	785,490	783,374	213,945	1,424,297	569,880	1,288,647	9,042,008
1890	4,150,599	751,360	1,087,617	207,687	1,289,864	547,947	1,393,687	9,428,761
1891	4,129,686	1,007,172	1,194,724	236,933	894,467	420,357	1,516,755	9,400,094
1892	4,313,307	951,963	1,033,377	318,204	1,035,637	367,677	1,345,703	9,365,868
1893	3,774,738	915,921	1,085,167	354,271	716,546	345,636	1,365,164	8,557,443
1894	4,827,016	887,865	1,194,545	366,483	317,655	224,958	1,266,626	9,085,148
1895	3,662,131	1,162,181	1,262,711	378,510	326,029	188,702	1,409,889	8,390,153
1896	4,391,848	1,041,428	1,251,993	411,882	572,355	198,081	1,309,749	9,177,336
1897	4,443,144	980,204	1,566,286	553,122	495,175	197,601	1,360,735	9,596,267
1898	4,645,804	1,080,691	1,698,750	539,466	410,677	253,805	1,695,795	10,324,988
1899	4,324,627	1,513,180	2,088,856	713,617	913,678	378,066	1,867,716	11,799,740
1900	4,749,196	1,439,602	2,123,881	969,731	1,230,565	549,342	1,992,932	13,055,249
1901	3,699,103	1,753,784	2,253,262	1,121,091	1,532,386	425,142	1,905,692	12,690,460
1902	3,354,563	1,951,426	2,718,763	1,369,341	1,045,986	755,232	2,302,288	13,498,599

The preceding table shows that the value of the exports of New Zealand produce fell from £9,428,761 in 1890 to £8,390,153 in 1895, rose in 1896 to £9,177,336, in 1897 to £9,596,267, in 1898 to £10,324,988, in 1899 to £11,799,740, in 1900 to £13,055,249, in 1901 declined to £12,690,460, but in 1902 increased to £13,498,599, the highest value yet attained in any one year.

Thus there was a net increase of exports, since 1895, to the value of £5,108,446, all New Zealand produce, and far more than a recovery to the figures for 1890 and 1891 (after which had followed a decrease in values). With the amount of increase in money must be considered the state of prices of the various kinds of produce.

The export of wool, measured by quantity, rose from 102,817,077 lb. in 1890 to 160,419,023 lb. in 1902, or at the rate of 56·02 per cent., and that of frozen meat from 898,894 cwt. to 2,138,557 cwt.

Gold, too, which was exported to the quantity of 187,641 oz. in 1890, increased to 507,852 oz. in 1902, the rate of increase being 170·65 per cent.

Re-exports.

The re-export trade of the colony would seem from the subjoined figures to have been almost stationary for the last thirteen years, the figures for 1890 and 1902 only differing by a sum of £3,695. The re-exports of merchandise in 1902 were valued at £136,860, or only 1 per cent. of the total exports, excluding specie.

EXPORTS OF BRITISH, FOREIGN, AND OTHER COLONIAL PRODUCE (EXCLUDING SPECIE).

	£		£
1890	140,555	1897	144,955
1891	160,765	1898	124,850
1892	125,052	1899	123,682
1893	123,402	1900	168,009
1894	136,402	1901	179,350
1895	127,966	1902	136,860
1896	122,571		

With these sums may be contrasted the re-export trade of New South Wales—a State having somewhat less than double the population of New Zealand—which, exclusive of specie, amounted in 1901 to £3,458,023, or no less than 15·04 per cent. of the value of all goods exported.

Exports from the North and Middle Islands.

The exports from the North and Middle Islands respectively, excluding "Parcels-post," during the last four years were as under:—

Year.	North Island. £	Middle Island. £	Proportion to Total Export. North Island.	Middle Island.
1899	6,011,239	5,916,290	50·40	49·60
1900	6,707,964	6,526,397	50·70	49·30
1901	6,077,724	6,787,546	47·24	52·76
1902	7,085,275	6,543,389	51·99	48·01

The North Island exported in 1902 more than half of the total for the two Islands.

EXPORTS TO DIFFERENT COUNTRIES.

The following are the values of exports to different countries or places in 1902 and 1901, arranged in order of magnitude of increase or decrease in later year to each:—

Country, Colony, State, &c.	1902. £	1901. £	Increase. £
Victoria	1,295,233	754,833	540,400
United Kingdom	9,450,648	9,295,375	155,273
United States (East Coast) ..	447,623	332,175	115,448
New South Wales	1,118,193	1,024,065	94,128
Queensland	62,988	23,411	39,577
Western Australia	132,907	95,319	37,588
Hongkong	66,354	29,792	36,562
Fiji	59,690	43,709	15,981
Friendly Islands	36,980	30,502	6,478
Navigator Islands	30,537	25,047	5,490
Brazil	4,909	252	4,657
British Columbia	4,348	1,371	2,977
Canada	3,018	747	2,271
Philippine Islands	2,193	..	2,193
Japan	3,780	1,640	2,140
Uruguay	1,877	126	1,751
Denmark	5,966	4,888	1,078

Country, Colony, State, &c.	1902. £	1901. £	Increase. £
Norfolk Island	3,549	2,485	1,064
Portuguese East Africa ..	1,045	611	434
Belgium	394	14	380
New Caledonia	2,011	1,735	276
Sandwich Islands	1,713	1,524	189
Marshall Islands	140	..	140
Transvaal Colony	122	..	122
New Hebrides	125	23	102
Singapore	284	211	73
Java	40	..	40
Caroline Islands	458	425	33
Italy	32	..	32
Falkland Islands	15	..	15
Rhodesia	13	..	13
Bombay	54	42	12
Surprise Island	22	10	12
New Britain	595	585	10
Guam	32	16	6
Chili	4	..	4
Orange River Colony	3	..	3
Norway	3	..	3
Peru	2	..	2

Country, Colony, State, &c.	1902. £	1901. £	Decrease. £
United States (West Coast) ..	42,341	186,904	144,563
Cape Colony	79,213	119,758	40,545
Natal	674,708	705,107	30,399
Cook Islands*	..	21,849	21,849
China	42	15,407	15,365
Tasmania	40,996	53,260	12,264
South Australia	34,033	42,943	8,910
Bengal	1,728	9,550	7,822
Spain	..	7,261	7,261
Canary Islands	44	5,740	5,696
Society Islands	23,393	27,612	4,219
Savage Island*	..	1,883	1,883
Germany	9,389	10,470	1,081
Sweden	166	692	526
Ceylon	377	596	219
Argentine Republic	542	760	218
Malden Island	1	205	204
Switzerland	42	132	90
West Indies	..	90	90
Antarctic Regions	..	62	62
Holland	42	100	58
Austria	12	59	47
France	15	36	21
Asia Minor	..	7	7
Madras	2	6	4
Burmah	1	2	1

* These Islands are now annexed to New Zealand. The value of goods forwarded to them last year was £22,973.

Wool exported and produced.

The quantity of wool exported in 1902, as previously shown, was 160,419,023 lb., valued at £3,354,563, an increase of 13,598,944 lb., or

9·26 per cent. on the quantity exported in the previous year, but a decrease of £344,540, or 9·31 per cent. on the value. The annual production of wool is best estimated by taking the exports for the twelve months immediately preceding the commencement of shearing, and adding thereto the quantity used in the colony for manufacturing purposes.

The following shows the produce for each of the last fifteen years ending on the 30th September :—

Year ending 30th September.	Quantity exported.	Quantity purchased by Local Mills.	Total Annual Produce.
	Lb.	Lb.	Lb.
1888	89,276,268	4,079,563	93,355,831
1889	95,618,507	3,556,004	99,174,511
1890	102,522,185	2,979,293	105,501,478
1891	108,619,473	2,918,073	111,537,546
1892	110,860,050	3,388,954	114,249,004
1893	119,643,874	2,629,855	122,273,729
1894	128,480,457	2,476,155	130,956,612
1895	129,333,769	3,299,132	132,632,901
1896	128,309,673	3,989,934	132,299,607
1897	134,410,955	3,298,469	137,709,424
1898	150,401,399	3,763,831	154,165,230
1899	143,644,203	4,258,505	147,902,708
1900	144,829,515	3,223,392	148,052,907
1901	143,064,789	4,629,924	147,694,713
1902	155,652,563	4,203,912	159,855,875

From these figures it appears that, notwithstanding the apparent decrease from 1898 to 1901, the wool-clip has increased by over 71 per cent. during the last fifteen years.

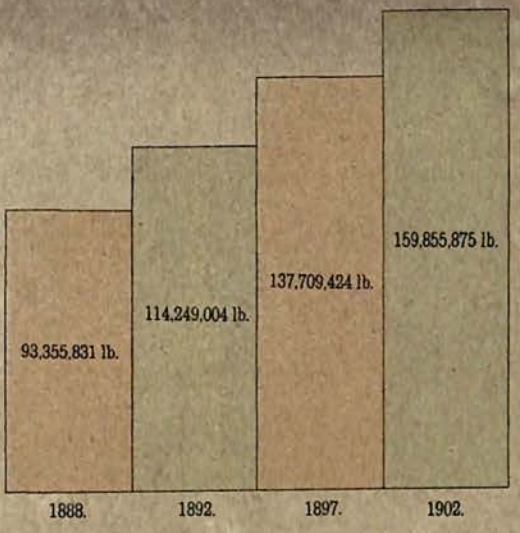
To arrive at a perfectly correct estimate of the increase in wool-production it would be necessary to take into consideration the proportion of greasy, scoured (and sliped), and washed wool exported each year, the washing process of course greatly reducing the weight. The percentages of greasy, scoured, and washed wool to the total quantities exported during the last five years are :—

Years.	Greasy. Per Cent.	Scoured and Sliped. Per Cent.	Washed. Per Cent.
1898	78·62	20·36	1·02
1899	77·54	21·64	0·82
1900	78·62	20·10	1·28
1901	78·25	20·61	1·14
1902	73·82	24·26	1·92

The increase in the wool-production is, of course, mainly due to the greater number of sheep—namely, 20,342,727 in April, 1902, against 15,423,328 in May, 1889. A comparative statement for several years is supplied, showing the number of flocks in groups of sizes :—

DIAGRAM No. 3.

WOOL PRODUCED, 1888, 1892, 1897, and 1902.



FROZEN MEAT EXPORTED, 1882, 1887, 1892, 1897, and 1902.

(See page 328.)

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NUMBER OF FLOCKS, 1890 TO 1902.

Size of Flocks.	1890.	1892.	1894.	1896.	1898.	1900.	1902.
Under 500	7,662	8,822	10,314	12,028	12,886	12,239	11,961
500 and under 1,000..	1,528	2,033	2,427	2,605	2,708	2,810	3,158
1,000 „ 2,000..	854	1,193	1,409	1,460	2,412*	2,621†	2,962‡
2,000 „ 5,000..	586	761	933	892			
5,000 „ 10,000..	283	314	345	340	341	352	385
10,000 „ 20,000..	236	231	230	231	231	196	206
20,000 and upwards ..	160	176	179	147	144	139	131
Totals ..	11,309	13,530	15,837	17,703	18,722	18,357	18,803

* From 1,000 to 2,500, 1,798 flocks; from 2,500 to 5,000, 614 flocks.
† From 1,000 to 2,500, 1,971 flocks; from 2,500 to 5,000, 650 flocks.
‡ From 1,000 to 2,500, 2,232 flocks; from 2,500 to 5,000, 730 flocks.

It will be apparent that the general tendency of increase since the year 1890 is towards the multiplication of the smaller flocks, whose owners are better able to cope with the rabbit difficulty than the large runholders.

Export of Rabbit-skins.

Prior to 1878 rabbit-skins were a very small item in the exports, but in that year the number sent out of the colony amounted to 3,951,209. Ten years after (1888) the export had risen to 11,809,407, from which it increased to 17,041,106 in 1893, the greatest number as yet exported in a year. From 1895 the fall was rapid, and the export for 1898 only reached 6,607,934 skins. In 1899 there was a slight upward tendency, the number exported being 7,891,648, which, however, fell to 5,690,893 in the year 1900. In 1901 7,122,008 skins were exported, and in 1902 only 6,139,794 skins.

The figures for the years in which there has been decline are quoted :—

Year.	Number of Rabbit-skins exported.	Year	Number of Rabbit-skins exported.
1893	17,041,106	1898	6,607,934
1894	14,267,385	1899	7,891,648
1895	15,229,314	1900	5,690,893
1896	10,828,612	1901	7,112,008
1897	8,099,334	1902	6,139,794

From the above it will be seen that the importance of the export has very much diminished. The fall, represented in money value, has been :—

Year.	Value of Rabbit-skins exported. £	Year.	Value of Rabbit-skins exported. £
1893	138,952	1898	51,607
1894	87,993	1899	81,118
1895	85,022	1900	41,689
1896	65,599	1901	57,046
1897	47,472	1902	52,566

While the amount of money received for this produce of the colony shows less profit than formerly, it may be a satisfactory

result, as seemingly indicating some abatement of the rabbit-pest. Large quantities of frozen rabbits are now exported, and are alluded to in the remarks on the frozen-meat industry on the next page.

Export of Sheepskins and Pelts.

These form a more important article of export at the present time than the rabbit-skins, though in the year 1888 the position was the reverse as regards value in money. In 1888 the number of sheepskins and pelts sent away from New Zealand was 1,646,401, against 6,144,680 in 1902, a rise of 273·22 per cent. for the period between those years. The value increased from £83,574 to £375,876, or 349·75 per cent. Figures for the last nine years are quoted:—

Year.	Export of Sheepskins and Pelts. No.	Year.	Export of Sheepskins and Pelts. No.
1894 ..	2,681,552	1899 ..	4,960,054
1895 ..	3,230,539	1900 ..	4,669,430
1896 ..	3,001,791	1901 ..	4,601,531
1897 ..	3,688,051	1902 ..	6,144,680
1898 ..	4,995,325		

Export of Tallow.

Besides wool and meat, tallow is largely exported, and since the year 1888, when 136,460 cwt. were sent away, the export has increased to 424,060 cwt. in 1902. In value this export considerably exceeds that of either sheepskins or rabbit-skins, and the money is indeed more than the total for those two articles taken together. The nine latest years show the following results:—

TALLOW EXPORTED.

Years.	Cwt.	£	Years.	Cwt.	£
1894 ..	199,400	204,499	1899 ..	338,620	311,649
1895 ..	263,560	260,999	1900 ..	367,780	368,473
1896 ..	222,540	208,821	1901 ..	335,360	351,710
1897 ..	310,200	259,964	1902 ..	424,060	550,131
1898 ..	347,160	302,141			

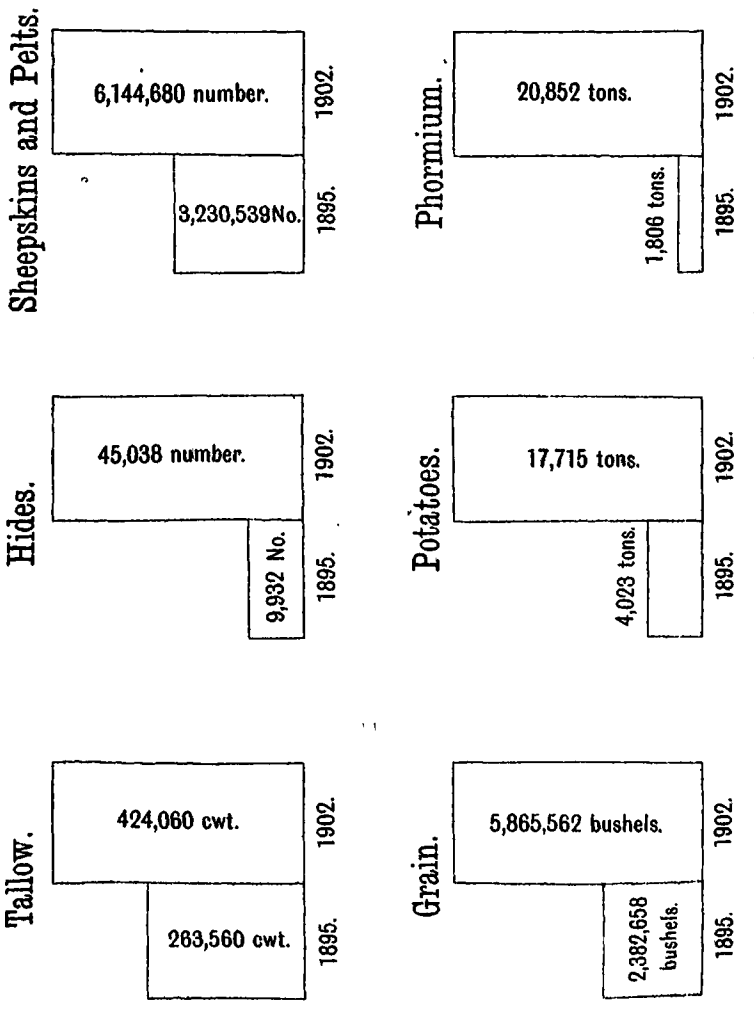
Frozen Meat exported.

Frozen meat now takes second place among the exports of New Zealand produce. In 1902, 2,138,557 cwt., valued at £2,718,763, were shipped in the colony. An account of the development of the industry was given in a special article in the Year-book, 1894. The total export for each year since the commencement of the trade has been:—

Year.	Lb.	Year.	Lb.
1882 ..	1,707,328	1893 ..	100,262,453
1883 ..	9,853,200	1894 ..	114,827,216
1884 ..	28,445,228	1895 ..	127,018,864
1885 ..	33,204,976	1896 ..	123,576,544
1886 ..	38,758,160	1897 ..	157,687,152
1887 ..	45,035,984	1898 ..	173,798,576
1888 ..	61,857,376	1899 ..	208,972,624
1889 ..	73,564,064	1900 ..	206,621,072
1890 ..	100,934,756	1901 ..	208,045,264
1891 ..	110,199,082	1902 ..	239,519,384
1892 ..	97,636,557		

DIAGRAM No. 4.

RISE IN THE EXPORT OF CERTAIN PRINCIPAL ARTICLES, THE PRODUCE OF THE COLONY, 1895-1902—continued.



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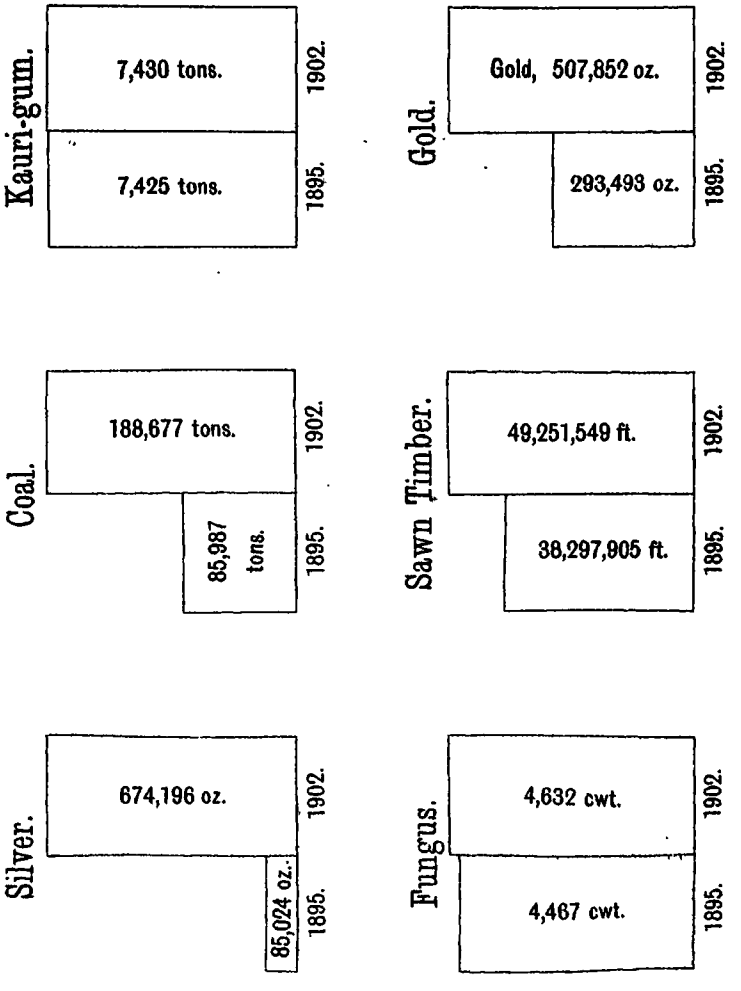
RISE IN THE EXPORT OF CERTAIN PRINCIPAL ARTICLES, THE PRODUCE OF THE COLONY, 1895-1902–

(See also following diagram.)



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The above figures for 1899 include 129,224 cwt., or 4,876,534 (number) of frozen rabbits and hares in the skin; those for 1900 include 12,260 (731 cwt.) of hares, and 6,501,997 rabbits, weighing 167,971 cwt., valued at £154,856, those for 1901, include 42,202 (2,943 cwt.) of hares, and 4,830,669 (124,353 cwt.) of rabbits, valued at £117,813, and those for 1902 include 23,421 (1,643 cwt.) of hares, and 4,776,914 (123,229 cwt.) rabbits, valued at £118,884, so that rabbits can hardly now be looked upon as wholly worthless, especiallly when the export of the skins, previously remarked upon, is further considered.

To ascertain the total value of the meat export in 1902 it is necessary to take into consideration, with the amount of £2,718,763, value of frozen meat before stated, £10,245 for frozen fish; also the value of preserved meats, £123,534; of salted beef and pork, £9,837; and of bacon and hams, £18,590.

Gold exported.

The amount of gold exported in 1902 was 507,852 oz., an increase of 52,294 oz. on the quantity exported in 1901.

The total quantity of gold entered for duty to the 31st December, 1902, which may be reckoned as approximately the amount obtained in the colony, was 15,572,507 oz., of the value of £61,111,316. For fuller information, see special section on mining.

Grain exported.

The value of the grain exported in 1902 was £786,548. The grain exports for 1901 and 1902 were made up as under :—

	1901.		1902.	
	Bushels.	£	Bushels.	£
Wheat	2,301,092	276,111	194,671	31,074
Oats	10,514,924	922,301	5,185,812	666,664
Barley	119,779	13,241	151,360	25,062
Malt	141,324	32,252	2,865	705
Maize	124,447	15,085	225,829	40,417
Peas and beans	166,184	26,028	102,314	22,097
Rye and unenumerated ..	5,765	793	2,711	529
Total quantity and value	13,373,515	£1,285,811	5,865,562	£786,548

Compared with the previous year the quantity and value of grain exported in 1902 show a considerable decrease.

From the year 1890 to 1898, inclusive, the decline in the export of wheat was very great, while for 1899–1900 and 1901 there was a revival, as will be seen by the following figures. But for 1902 the quantity sent out of the colony fell to less than 200,000 bushels :—

Year.	Wheat exported. Bushels.	Year.	Wheat exported. Bushels.
1890	4,467,026	1899	2,901,676
1892	2,460,774	1900	2,867,069
1894	228,904	1901	2,301,092
1896	453,123	1902	194,671
1898	10,090		

The imports of wheat during 1898 exceeded the exports by upwards of 50,000 bushels, but in 1899, 1900, 1901, and 1902 the imports were practically nil, the small quantity introduced into the colony being for seeding purposes only.

In oats, the quantity exported in 1902 shows a large decrease over that for the previous year:—

Year.	Export of Oats. Bushels.	Year.	Export of Oats. Bushels.
1891	4,052,414	1899	3,520,734
1892	3,830,444	1900	5,818,648
1894	1,963,288	1901	10,514,924
1896	2,247,053	1902	5,185,812
1898	816,210		

The acreages under cereals for the last four years have been:—

	1899-1900. Acres.	1900-1901. Acres.	1901-1902. Acres.	1902-1903. Acres.
Land in wheat (for threshing) ..	269,749	206,465	163,462	194,355
" oats " ..	398,243	449,534	405,924	483,659
" barley " ..	48,003	30,831	26,514	27,921

Butter and Cheese exported.

The total quantity of butter and cheese exported in the past fourteen years, and the amount of either commodity sent to the United Kingdom is tabulated:—

Year.	Total Export of Butter.	Butter Exported to the United Kingdom.	Total Export of Cheese.	Cheese Exported to the United Kingdom.
	Cwt.	Cwt.	Cwt.	Cwt.
1889	37,955	21,099	26,558	7,633
1890	34,816	26,579	40,451	31,043
1891	39,430	28,989	39,770	29,565
1892	53,930	41,509	41,493	30,000
1893	58,149	52,363	46,201	41,567
1894	60,771	58,845	55,655	54,540
1895	57,964	55,194	76,743	73,369
1896	71,353	60,092	71,372	58,692
1897	99,002	79,849	77,683	67,681
1898	96,801	80,814	68,711	41,412
1899	136,086	121,502	69,440	40,901
1900	172,583	165,871	102,849	81,908
1901	201,591	170,903	104,294	74,510
1902	253,998	170,207	74,746	50,325

Of the butter exported in 1902, 170,207 cwt., valued at £1,782,485, were shipped to the United Kingdom; 20,688 cwt., value £107,506, to New South Wales; 43,898 cwt., value £214,337, to Victoria; 1,763 cwt., value £9,711, to Tasmania; 7,056 cwt., value £35,860, to Western Australia; 299 cwt., value £1,475, to South Australia; 3,098 cwt., value £17,544 to Queensland; 559 cwt., value £2,856, to Fiji; 5,315 cwt., value £27,963, to Cape Colony and Natal; 797 cwt., value £4,482, to the South Sea Islands; 200 cwt., value £1,032, to Portugese East Africa; 112 cwt., value £521, to British Columbia; and 6 cwt., valued at £30, to Bengal and Ceylon.

ERRATUM.

On page 330, tenth line from bottom of page, *for* £1,782,485 *read* £782,485.

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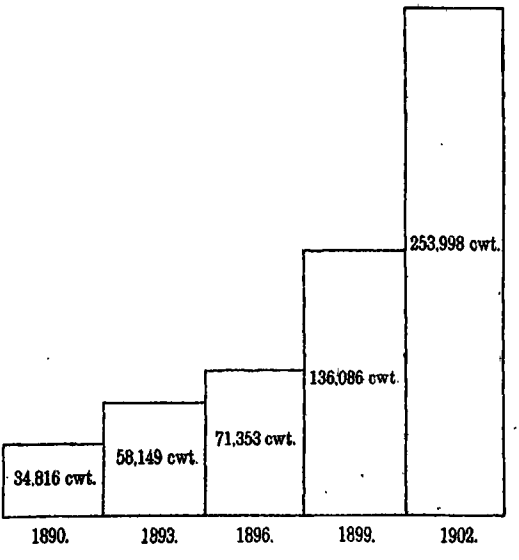
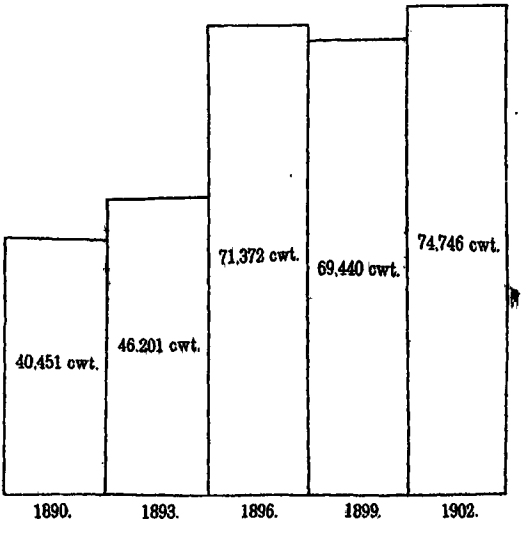
EXPORT OF BUTTER, 1890, 1893, 1896, 1899, 1902.



EXPORT OF CHEESE, 1890, 1893, 1896, 1899, 1902.



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Of the cheese exported, 50,325 cwt., valued at £105,663, were sent to the United Kingdom; 7,047 cwt., value £16,588, to New South Wales; 6,050 cwt., value £13,542, to Victoria; 6,175 cwt., value £14,990, to Western Australia; and 4,001 cwt., value £9,923, to the other Australian States. While the quantity of butter exported in 1902, 253,998 cwt., shows an increase of 569 per cent. on the quantity exported in 1889, the increase in the export of cheese during the fourteen years has been at the rate of 181 per cent.—74,746 cwt. in 1902, as against 26,558 cwt. in 1889.

Phormium exported.

Phormium, of which 20,852 tons (excluding 1,335 tons of tow), valued at £534,031, were exported in 1902, shows a very great increase in the export, on comparing the figures for last year with those for 1901, when the quantity sent away was 10,171 tons. Outside of the question of prices, a large permanent development of this industry depends on the cultivation and careful selection of the plants used, and on improvements in the method of preparing the fibre.

Kauri-gum exported.

The export for 1902 (7,430 tons) is a substantial one. The value was £450,223, or an average of £60 11s. 11d. per ton. Full information as to the uses of this resin and the kauri-gum industry generally is given in a special article in Part III. of the Year-book for 1900. It embraces interesting matter from the report of the Royal Commission which investigated the whole subject in 1898.

Exports from different Ports, &c.

The following table gives the values of the exports from each port in New Zealand for the last two years, arranged in order of magnitude for 1902:—

	1902. £	1901. £
Wellington	2,567,268	1,943,963
Lyttelton	2,382,429	2,489,470
Auckland	2,091,016	1,922,792
Dunedin	1,618,294	1,463,237
Invercargill and Bluff	938,599	1,005,278
Napier	838,910	806,110
Timaru	685,759	849,986
New Plymouth	413,911	436,580
Greymouth	411,115	406,966
Poverty Bay	397,039	373,817
Wanganui	307,345	284,162
Patea	249,750	49,190
Oamaru	154,252	260,903
Wairau and Picton	143,094	127,705
Kaipara	131,789	192,316
Westport	97,206	61,965
Waitara	88,247	68,794
Nelson	70,080	87,218
Hokitika	42,561	34,818

The decrease of exports during 1902 was £66,679 at Invercargill and Bluff, and £107,041 at Lyttelton.

Details of all Exports, 1902.

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Acid—						
Unenumerated	lb.	..	234	..	13	13
Alkali—						
Soda, carbonate and bicarbonate	cwt.	8	..	3	..	3
Potash	"	..	10	..	20	20
Animals, living—						
Birds	No.	4	..	2	..	2
Bees	..	..	..	8	..	8
Dogs	No.	26	1	77	10	87
Donkeys	"	5	..	30	..	30
Cattle (horned)	"	3,062	..	39,263	..	39,263
Horses	"	1,308	3	28,394	45	28,439
Pigs	"	326	..	531	..	531
Poultry	"	5,680	..	815	..	815
Sheep	"	48,047	..	44,839	..	44,839
Apparel and slops	..	..	..	2,267	2,836	5,103
Arms, ammunition, and explosives—						
Caps, percussion	No.	..	26,000	..	5	5
Cartridges	"	14,450	23,175	86	125	211
Detonators	"	..	16,500	..	34	34
Dynamite	lb.	..	2,350	..	176	176
Firearms	No.	..	101	..	421	421
Fuse	coils	..	500	..	17	17
Ordnance stores	..	..	..	..	159	159
Powder, blasting	lb.	..	400	..	16	16
Powder, sporting	"	..	1,200	..	115	115
Shot	cwt.	..	1	..	5	5
Swords	No.	..	27	..	44	44
Bacon and hams—						
Bacon	cwt.	1,368	..	4,395	..	4,395
Hams	"	4,542	..	14,195	..	14,195
Bags and sacks—						
Cornsacks	doz.	750	18,592	188	3,761	3,949
Unenumerated	"	28	4,175	3	418	421
Basketware and wickerware	..	..	..	..	2	2
Bêche-de-mer	cwt.	20	..	61	..	61
Beer	galls.	25,892	6,053	3,139	1,534	4,673
Belting, leather	lb.	..	28	..	8	8
Beverages, non-alcoholic—						
Aerated and mineral waters,	doz	923	462	191	20	211
Coffee essence	..	..	..	1	..	1
Limejuice, unsweetened	galls.	..	7,943	..	547	547
Unenumerated	"	..	..	15	..	15
Bicycles and tricycles	No.	1	157	20	1,488	1,508
Materials for	..	..	..	1	1,031	1,032

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Biscuits—				£	£	£
Fancy, and other kinds	lb.	4,771	..	109	..	109
Ship's plain ..	cwt.	4,082	..	3,441	..	3,441
Blacklead	..	..	..	..	7	7
Boats	No.	6	..	236	..	236
Bones	tons	4	..	16	..	16
Books, printed		..	..	2,231	2,730	4,961
Boots and shoes ..	doz. prs.	83	485	303	1,183	1,486
Bran	tons	6,432	..	31,684	..	31,684
Brass—						
Pigs, bars, tubes, or sheets	cwt.	..	14	..	70	70
Manufactures ..	..	..	..	6	84	90
Bricks, Fire	No.	7,586	..	59	..	59
Brushware and brooms—						
Unenumerated ..	..	..	..	4	10	14
Butter	cwt.	253,998	..	1,205,802	..	1,205,802
Carpeting and druggeting ..		..	..	..	1,155	1,155
Carriages, &c.—						
Carriages	No	12	..	422	..	422
Carts and wagons ..	"	47	..	531	..	531
Perambulators ..	"	3	..	8	..	8
Materials for ..	..	..	..	7	36	43
Casks, empty ..	No.	2	701	3	457	460
Cement	barrels	13	156	7	94	101
Chaff	tons	356	..	1,705	..	1,705
Chains	cwt.	..	6	..	8	8
Cheese	"	74,746	..	163,539	..	163,539
Chinaware	..	..	..	5	227	232
Clocks	No.	..	26	..	164	164
Coals	tons	188,677	3,427	154,747	3,895	158,642
Cocoa and Chocolate ..	lb.	..	3,154	..	165	165
Coffee—						
Raw	"	1,824	6,268	50	387	427
Roasted	"	307	484	15	26	41
Confectionery—						
Chocolate in fancy packages ..		..	..	..	37	37
Unenumerated ..	lb.	11,350	..	319	..	319
Copper nails	cwt.	..	2	..	10	10
Copra	tons	..	319	..	4,264	4,294
Cordage	cwt.	820	238	1,655	552	2,207
Iron and steel ..	"	..	97	..	305	305
Cotton piece-goods—						
Calico, white and grey ..		..	..	..	984	984
Shirtings	..	..	..	..	133	133
Waterproof material ..	..	..	..	..	15	15
Unenumerated ..	..	..	..	5	5,152	5,157
Cotton—						
Raw	lb.	..	1,590	..	37	37
Waste	cwt.	..	2	..	4	4

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Cutlery		..	..	..	86	86
Doors	No.	1,086	..	851	..	851
Drapery		..	..	92	1,959	2,051
Drugs, chemicals, and druggists' wares—						
Anhydrous ammonia		..	..	25	..	25
Chemicals n.o.e.		..	..	598	188	786
Disinfectants		..	..	82	65	147
Drugs, and druggists' sundries		..	..	622	3,120	3,742
Dyes		..	..	..	197	197
Insecticides		..	..	4	11	15
Sheep-dip		..	..	524	536	1,060
Earthenware		..	..	266	834	1,100
Eggs	doz.	2,152	..	141	..	141
Engine-packing	cwt.	..	13	5	111	116
Essential oils	lb.	..	2,837	..	178	178
Fancy-goods and toys		..	..	1,024	2,160	3,184
Curiosities		..	..	64	..	64
Fire-clay	tons	15	..	39	..	39
Fish—						
Dried, pickled, and salted	cwt.	22	40	47	90	137
Potted and preserved	lb.	195,871	75,309	5,723	2,041	7,764
Frozen	cwt.	7,840	..	10,245	..	10,245
Ova	No.	330,000	..	333	..	333
Fishing-tackle		..	..	..	1	1
Floorcloth and oilcloth		..	..	..	49	49
Flour	tons	370	11	3,613	122	3,735
Foods, Animal—						
Unenumerated		..	..	1,605	..	1,605
Foods, farinaceous—						
Maizena and cornflour	lb.	..	3,120	..	40	40
Unenumerated		..	..	104	..	104
Fruits—						
Bottled and preserved	doz.	96	171	34	59	93
Dried: Currants	lb.	..	27,697	..	261	261
Raisins	"	..	21,893	..	406	406
Unenumerated	"	..	24,473	..	388	388
Fresh	"	106,526	1,920	1,097	9	1,106
Pulp and partially preserved fruit	lb.	152,171	..	2,010	..	2,010
Fungus	cwt.	4,632	..	10,257	..	10,257
Furniture and upholstery		..	..	718	364	1,082
Furniture, knife, and plate polish and powder		..	..	..	177	17

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Furs		..	..	..	20	20
Gelatine and Isinglass	lb.	..	807	..	88	88
Glass bottles, empty	..	..	..	24	172	196
Glassware	..	..	..	83	484	567
Glue and size	cwt.	179	..	98	..	98
Glycerine	"	523	..	890	..	890
Gold	oz.	507,852	..	1,951,426	..	1,951,426
Gold-leaf	..	..	..	..	21	21
Grain and pulse—						
Barley	bush.	151,360	..	25,062	..	25,062
Beans and peas	"	102,314	10	22,097	3	22,100
Maize	"	225,829	..	40,417	..	40,417
Oats	"	5,185,812	..	666,664	..	666,664
Rye	"	2,148	..	363	..	363
Wheat	"	194,671	..	31,074	..	31,074
Unenumerated	"	563	..	166	..	166
Grease	cwt.	44	62	117	47	164
Grindery	..	..	..	17	..	17
Gum, kauri	tons	7,430	..	450,223	..	450,223
Haberdashery	..	..	..	4	308	312
Buttons	..	..	..	..	301	301
Sewing-cottons, &c.	..	..	..	..	1,280	1,280
Hair	cwt.	740	..	3,831	..	3,831
Hardware, hollow-ware, and ironmongery	..	..	..	120	2,995	3,115
Hats and caps	doz.	8	59	16	150	166
Hatters' materials	..	..	..	..	217	217
Hay and straw	tons	1,280	..	4,998	..	4,998
Hides	No.	45,038	..	44,546	..	44,546
Honey	lb.	37,390	..	677	..	677
Hops	cwt.	4,311	81	14,292	269	14,561
Horns and hoofs	tons	1,602	..	1,186	..	1,186
Hosiery	..	..	..	736	539	1,275
Indiarubber goods	..	..	..	..	612	612
Ink, writing	..	..	..	..	24	24
Instruments, musical—						
Harmoniums, &c.	No.	..	2	..	115	115
Pianofortes	"	..	18	..	583	583
Unenumerated	..	..	..	..	541	541
Instruments—						
Scientific	..	..	..	..	225	225
Surgical and dental	..	..	..	..	372	372
Surveying	..	..	..	20	117	137
Iron and steel—						
Bar, bolt, and rod	tons	..	27	..	429	429

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Iron and steel—*continued.*				£	£	£
Bolts and nuts	cwt.	..	21	..	20	20
Castings for ships	tons	1	5	43	459	502
Galvanised manufactures		..	..	350	447	797
Pipes and fittings	tons	..	2	3	30	33
Sheet, galvanised and corrugated	cwt.	..	3,252	..	2,786	2,786
Sheet, galvanised plain	"	..	94	..	103	103
Tanks, 400 galls.	No.	..	18	..	61	61
Tanks, 200 galls.	"	..	1	..	2	2
Wire, fencing, barbed	tons	..	112	..	307	307
Wire, fencing, plain		..	..	..	2	2
Wire netting		..	..	..	39	39
Wire, n.o.e.	tons	208	..	418	..	418
Unenumerated	"	..	49	..	55	55
Jams, jellies, and preserves	lb.	5,066	5,705	97	86	183
Jellies, concentrated	"	32	1,661	2	51	53
Jewellery		..	..	675	162	837
Lamps, lanterns, and lampwick		..	..	..	206	206
Lard	cwt.	986	..	2,470	..	2,470
Lead, pipe	"	9	..	10	..	10
Leather	"	15,469	26	92,636	526	93,162
Leather manufactures, unenumerated		..	..	33	470	503
Lime	bush.	1,100	..	55	..	55
Linen piece-goods		..	..	..	45	45
Linseed	cental	10,948	..	6,146	..	6,146
Machinery—						
Agricultural		..	..	5,557	3,031	8,588
Dairying		..	..	47	773	820
Brickmaking		..	..	..	200	200
Dredging		..	..	7,395	917	8,312
Electric		..	..	6	1,004	1,010
Engines, steam	No.	..	2	..	77	77
" " parts of		..	..	..	113	113
" gas and oil	No.	..	4	..	307	307
Flour-milling		..	..	44	906	950
Gas-making		..	..	..	303	303
Mining		..	..	2,650	88	2,738
Paper-milling		..	..	..	50	50
Portable and traction engines	No.	..	2	..	750	750
Printing		..	..	..	1,072	1,072
Refrigerating		..	..	..	260	260
Sewing and knitting	No.	..	144	..	709	709
Wood-working		..	..	60	..	60
Woollen-milling		..	..	..	35	35
Unenumerated		..	..	840	6,690	7,530
Materials for, and parts of		..	..	..	152	152

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Malt	bush.	2,865	..	705	..	705
Manures—						
Bonedust	tons	34	..	186	..	186
Unenumerated	"	96	5	477	15	492
Marble	..	..	..	13	72	85
Matches and vestas—						
Wax	gross	..	456	..	195	195
Wooden	"	..	2,571	..	197	197
Mats and matting	..	..	..	91	22	113
Meal—						
Oaten	centals	36,085	..	21,578	..	21,578
Wheatmeal	"	45	..	36	..	36
Meats—						
Beef, fresh	cwt.	40	..	56	..	56
" frozen	"	286,699	..	370,691	..	370,691
" salted	"	7,963	..	9,708	..	9,708
Kidneys, frozen	"	6,214	..	10,722	..	10,722
Lamb, frozen	carcases	1,852,050	..	898,534	..	898,534
	=cwt.	586,837				
Mutton (whole carcases), frozen	carcases	2,058,622	..	1,183,072	..	1,183,072
	=cwt.	1,028,737				
Mutton (joints), frozen	cwt.	93,164	..	109,030	..	109,030
Pork, frozen	"	4,136	..	9,729	..	9,729
" salted	"	57	..	129	..	129
Poultry, frozen	"	2,775	..	8,101	..	8,101
Veal, frozen	"	1,191	..	1,682	..	1,682
Other kinds, frozen	"	3,932	..	8,318	..	8,318
Rabbits, frozen in the skins	No.	4,776,914	..	116,996	..	116,996
	=cwt.	123,229				
Hares, frozen in the skins	No.	23,421	..	1,888	..	1,888
	=cwt.	1,643				
Potted and preserved	"	54,271	87	124,534	99	124,633
Extract of meat	lb.	110,156	..	17,951	..	17,951
Unenumerated	cwt.	227	..	552	..	552
Medicines, patent	..	..	..	263	296	559
Metal, Manufactures of—						
Anchors	No.	..	1	..	10	10
Metal sheathing	cwt.	..	9	..	36	36
Typewriters	No.	..	6	..	52	52
Unenumerated	..	..	..	1,682	5,276	6,958
Metal, old	cwt.	29,100	..	6,326	..	6,326
Milk, preserved	lb.	614,708	47,078	12,305	995	13,300
Millinery—						
Feathers, ornamental	..	..	..	274	12	286
Other kinds	..	..	..	12	41	53
Minerals—						
Auriferous ore	tons	231	..	2,560	..	2,560
Chrome ore	"	175	..	525	..	525

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Minerals—*continued.*				£	£	£
Hæmatite	tons	17	..	116	..	116
Scheelite ore ..	"	39	..	1,200	..	1,200
Silver ore	"	1	..	1	..	1
Sulphur	"	100	..	475	..	475
Unenumerated ..	"	44	..	186	..	186
Mustard	lb.	..	348	..	13	13
Nails	cwt.	..	339	..	283	283
Nuts—						
Almonds in shell ..	lb.	..	6	..	2	2
Oakum	cwt.	..	9	..	19	19
Oil—						
Castor, bulk ..	galls.	..	399	..	45	45
" bottled ..	doz. pts.	..	106	..	43	43
Cod-liver	galls.	..	3	..	8	8
Colza	"	..	1,189	..	181	181
Cocoanut	"	3,124	..	339	..	339
Linseed	"	..	3,317	..	545	545
Mineral, kerosene ..	"	..	126,776	..	5,742	5,742
" other kinds	"	..	4,979	..	333	333
Neatsfoot	"	292	15	16	3	19
Olive, bulk	"	..	599	..	86	86
Whale	"	7,696	..	608	..	608
Unenumerated ..	"	97	14,360	25	1,370	1,395
Oilmen's stores ..	..	..	..	130	1,755	1,885
Onions	cwt.	16,137	..	4,493	1,370	4,493
Oysters	doz.	339,685	..	2,867	..	2,867
Paints and colours—						
Ground in oil ..	cwt.	27	671	36	940	976
Mixed ready for use ..	"	1	223	3	923	926
Unenumerated ..	"	135	69	48	39	87
Paper-bags	"	1,200	..	1,021	..	1,021
Paper—						
Butter	"	12	..	61	..	61
Printing	"	..	110	..	117	117
Paperhangings ..	..	..	..	..	1	1
Wrapping	cwt.	575	25	455	38	493
Perfumery—						
Perfumed spirits ..	galls.	..	18	..	27	27
Unenumerated ..	..	..	..	..	103	103
Phormium	tons	20,852	..	534,031	..	534,031
Tow	"	1,335	..	5,359	..	5,359
Photographic goods ..	..	..	..	53	506	559
Pickles	galls.	14	..	3	..	3
Pictures	..	..	..	1,419	421	1,840
Picture-frames and mounts	..	..	..	..	18	18

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Pitch	cwt.	..	383	..	88	88
Plants and shrubs	..	..	..	502	..	502
Plate and platedware	..	..	..	10	2,580	2,590
Pollard and sharps	tons	1,314	..	7,839	..	7,839
Portmanteaux	..	..	..	..	7	7
Potatoes	tons	17,715	..	72,807	..	72,807
Printing materials	..	..	..	2	328	330
Provisions n.o.e.	..	..	..	1,861	559	2,420
Pumps	..	..	..	3	54	57
Rags	cwt.	439	18	434	3	437
Rice	"	..	655	..	499	499
Rugs	..	..	..	3,337	126	3,463
Saddlery	..	..	..	601	63	664
Harness oil	..	..	..	8	..	8
Salt	ton	..	1	..	3	3
Sashes	pairs	831	..	540	..	540
Sauces	galls.	34	283	14	186	200
Sausage-skins	cwt.	13,398	77	61,167	258	61,425
Seeds—						
Grass and clover	"	43,998	80	84,861	189	85,050
Unenumerated	..	..	..	1,511	596	2,107
Shell—						
Pearl	cwt.	..	114	..	327	327
Ship-chandlery, n.o.e.	..	..	..	255	1,036	1,291
Silk piece-goods	..	..	..	..	440	440
Silver	oz.	674,196	..	71,975	..	71,975
Skins—						
Calf and other	No.	18,575	..	711	..	711
Rabbit	"	6,139,794	..	52,566	..	52,566
Sheep, with wool	"	441,078	..	57,549	..	57,549
Sheep, without wool	"	5,703,602	..	318,327	..	318,327
Pelt pieces	lb.	339,360	..	738	..	738
Soap—						
Common	cwt.	5,770	..	5,172	..	5,172
Powder	..	..	..	1	91	92
Unenumerated	lb.	..	..	..	139	139
Specie—						
Gold	..	..	..	..	3,718	3,718
Silver	..	..	..	..	5,800	5,800
Specimens, illustrative of natural science	..	..	..	483	5	488
Spices—						
Ground	lb.	..	36	..	2	2
Unground	"	..	7,631	..	1,703	1,703
Spirits—						
Bitters, cordials, &c.	galls.	..	28	..	38	38

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Spirits—*continued.*				£	£	£
Brandy	galls.	..	932	..	463	463
Geneva and gin, unsweetened ..	"	..	1,121	..	357	357
Rum	"	..	180	..	56	56
Sweetened, &c. ..	"	..	16	..	8	8
Whisky	"	..	8,039	..	3,059	3,059
Unenumerated ..	"	..	4	..	6	6
Spirits of wine ..	"	..	52	..	4	4
Sponges	..	..	..	..	5	5
Starch	lb.	56	..	1	..	1
Stationery	..	..	..	1,263	654	1,917
Stone—						
Building	tons	650	..	628	..	628
Wrought	..	..	..	103	34	137
Greenstone ..	cwt.	91	..	569	..	569
Jade	"	24	..	45	..	45
Pumice	tons	683	..	1,794	..	1,794
Sugar—						
Refined	lb.	727,328	84,624	5,901	684	6,585
Tallow	tons	19,733	..	497,018	..	497,018
Mutton stock, and oleomargarine ..	tons	1,464	..	52,947	..	52,947
Oil	tons	6	..	166	..	166
Tarpaulins and tents ..	..	..	..	20	..	20
Tanning materials—						
Bark	tons	105	..	880	..	880
Other kinds ..	..	..	..	..	121	121
Tea	lb.	..	109,487	..	4,662	4,662
Textile piece-goods, other than silk, cotton, linen, or woollen		..	..	7	179	186
Articles made up from, other than apparel ..	..	..	..	8	164	172
Timber—						
Logs	No.	114	..	395	..	395
" hewn ..	sup. ft.	644,263	..	1,950	..	1,950
Sawn, undressed ..	"	47,013,669	4,981	193,902	72	193,974
" dressed ..	"	1,593,587	..	12,153	..	12,153
Unenumerated ..	..	..	..	1,202	..	1,202
Tin—						
Block	cwt.	..	147	..	128	128
Foil	lb.	..	560	..	20	20
Sheet	cwt.	..	152	..	146	146
Tinware	..	..	..	167	87	254
Tobacco—						
Manufactured ..	lb.	..	70,890	..	5,937	5,937
Cigars	"	..	3,327	..	937	937
Cigarettes	"	..	3,318	..	1,228	1,228

DETAILS OF ALL EXPORTS, 1902—*continued.*

Articles exported		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total
				£	£	£
Tobacco-pipes, &c.	..	..	..	..	2	2
Tools—						
Engineers' machine	..	..	..	..	296	296
Sheep-shears	..	..	..	..	18	18
Unenumerated	..	..	..	82	376	458
Tramway plant	..	..	..	33	131	164
Turpentine, driers, and terebine	..	gals.	42	..	7	7
Twine	..	cwt.	3	..	125	125
Nets and netting	..	..	..	..	12	12
Reaper and binder	..	cwt.	6,225	..	10,303	..	10,303
Umbrellas and parasols	..	..	..	..	168	168
Varnish and gold size	..	gals.	700	..	266	266
Vegetables	..	..	..	162	21	183
Vinegar	..	gals.	30	..	2	..	2
Watches	..	No.	..	237	..	313	313
Wax—						
Beeswax	..	cwt.	16	..	87	..	87
Paraffin, &c.	..	lb.	..	308	..	6	6
Whalebone	..	cwt.	15	..	540	..	540
Wine—						
Australian	..	gals.	..	1,694	..	658	658
Sparkling	..	"	..	413	..	800	800
Other kinds	..	"	103	898	58	550	608
Woodenware	..	..	..	..	1,059	752	1,811
Wool—						
Greasy	..	lb.	118,428,418	..	2,230,739	..	2,230,739
Scoured	..	"	20,289,134	..	610,066	..	610,066
Sliped	..	"	18,624,189	..	450,178	..	450,178
Washed	..	"	3,077,282	..	63,580	..	63,580
Woollen piece-goods	..	..	..	..	2,816	746	3,562
" blankets	..	pairs	433	..	503	..	503
Yarns	..	..	..	..	8	..	8
Zinc—						
Plain sheet	..	cwt.	..	43	..	27	27
Spelter	..	"	999	44	673	27	700
Goods, miscellaneous—						
Manufactured	..	..	..	..	470	93	563
Unmanufactured	..	..	..	..	1,603	547	2,150
Parcels Post	..	..	..	..	16,313	..	16,313

A table is appended giving details of goods forwarded in the year 1902 to the Cook and other Pacific Islands annexed to New Zealand in 1901. These do not appear as exports from the colony, being merely part of the internal trade or transactions between one portion of what is now New Zealand and another.

Articles.	Quantities.	Value.
		£
Animals, living—		
Cattle, horned	12 No.	148
Sheep	149 "	128
Apparel and slops	..	573
Bags and sacks, cornsacks	1,161 doz.	286
Biscuits	2,049 cwt.	936
Boots and shoes	76½ doz.	261
Butter and cheese	50 cwt.	274
Coal	1,515 tons	1,577
Calico piece-goods	..	1,703
Drapery, hosiery, haberdashery, millinery, hats	..	2,050
Fish, dried and preserved	12,369 lb.	321
Flour	77 tons	816
Hardware, cutlery, nails, tools	..	795
Iron and steel	671 cwt.	582
Meats, salted and preserved	1,028½ "	1,953
Oils	9,710 gals.	459
Oilmen's stores	..	429
Provisions, unenumerated	..	262
Soap, common	600 cwt.	451
Specie, silver	..	1,475
Spirits	950 gals.	282
Sugar, refined	105,724 lb.	937
Timber	553,938 sup. ft.	2,880
Tobacco, cigars, cigarettes	4,839 lb.	316
Miscellaneous	..	3,079
Total value of goods cleared outwards from Auckland		22,973

Particulars of goods cleared outwards from these annexed islands to Auckland in 1902 will be found in Section XV.

Total Value of Trade.

The value of the total trade of New Zealand advanced from £13,431,804 in the year 1886 to £24,971,700 in 1902. But of these amounts some portion was coin. Excluding the specie, the figures for 1886 are £12,853,736, and for 1902, £24,593,497.

Year.	Total Trade.	Imports.	Exports.	Imports (excluding Specie).	Exports (excluding Specie).	Excess of Exports over Imports (excluding Specie).
	£	£	£	£	£	£
1886	13,431,804	6,759,013	6,672,791	6,319,223	6,534,513	215,290
1887	13,111,684	6,245,515	6,866,169	6,064,281	6,680,772	616,491
1888	13,709,225	5,941,900	7,767,325	5,430,050	7,403,206	1,972,156
1889	15,650,727	6,308,863	9,341,864	5,980,583	9,183,954	3,203,371
1890	16,072,245	6,260,525	9,811,720	5,928,895	9,569,316	3,640,421
1891	16,070,246	6,503,849	9,566,397	6,431,101	9,560,859	3,129,758
1892	16,477,907	6,943,056	9,534,851	6,742,544	9,490,920	2,748,376
1893	15,896,879	6,911,515	8,985,364	6,494,279	8,680,845	2,186,566
1894	16,019,067	6,788,020	9,231,047	5,990,177	9,221,550	3,231,373
1895	14,950,353	6,400,129	8,550,224	6,115,953	8,518,119	2,402,166
1896	16,458,425	7,137,320	9,321,105	7,035,379	9,299,907	2,264,528
1897	18,072,216	8,055,223	10,016,993	7,994,201	9,741,222	1,747,021
1898	18,748,555	8,230,600	10,517,955	8,211,409	10,449,838	2,238,429
1899	20,677,968	8,739,633	11,938,335	8,613,656	11,923,422	3,309,766
1900	23,892,257	10,646,096	13,246,161	10,207,326	13,223,258	3,015,932
1901	24,699,339	11,817,915	12,881,424	11,353,416	12,869,810	1,516,394
1902	24,971,700	11,326,723	13,644,977	10,958,038	13,635,459	2,677,421

The trade for these years has been selected for exhibition in tabular form because during each of the series there was an excess of exports over imports, whereas previously the reverse obtained, and the colony was purchasing to an extent not covered by the value of the export. During the last seventeen years the excess of exports over imports, excluding money sent to and from the colony, amounted to a total sum of £40,115,459.

How different the foregoing conditions were from those previously obtaining will be seen by observing the balance of trade for the years 1881 to 1885 inclusive :—

Year.	Excess of Imports over Exports.	Year.	Excess of Imports. over Exports.
	£		£
1881 ..	.. 1,406,898	1884 ..	.. 235,981
1882 ..	.. 1,948,485	1885 ..	.. 539,239
1883 ..	.. 761,938		

The gradually declining excess of imports turned in 1886 and 1887 to a small excess of exports, but subsequently the excess of exports was very great, and attained the sum of £3,640,421 in the year 1890.

Again considering the results for the seventeen years, 1886–1902, during which the balance was in favour of the exports, the external trade is shown for each year per head of population, the calculations being made exclusive as well as inclusive of specie, for the purpose of arriving at exact conclusions as regard trade in goods. In the year 1894 the imported money amounted to a sum of £797,843, making a substantial difference in the rates.

Excluding specie, the trade per head of population increased from £22 1s. 7d., in 1886, to £30 16s. 6d. in 1902: imports from £10 17s. 1d. to £13 14s. 8d., and exports from £11 4s. 6d. to £17 1s. 10d.

Year.	Including Specie.			Excluding Specie.		
	Total Trade per Head of Mean Population (excluding Maoris).	Imports per Head of Mean Population (excluding Maoris).	Exports per Head of Mean Population (excluding Maoris).	Total Trade per Head of Mean Population (excluding Maoris).	Imports per Head of Mean Population (excluding Maoris).	Exports per Head of Mean Population (excluding Maoris).
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1886	23 1 5	11 12 2	11 9 3	22 1 7	10 17 1	11 4 6
1887	21 19 8	10 9 5	11 10 3	21 7 5	10 3 4	11 4 1
1888	22 12 11	9 16 4	12 16 7	21 4 0	8 19 5	12 4 7
1889	25 9 11	10 5 6	15 4 5	24 15 9	9 15 6	15 0 3
1890	25 13 10	10 0 2	15 13 8	24 19 4	9 11 0	15 8 4
1891	25 10 4	10 6 6	15 3 10	25 7 10	10 4 3	15 3 7
1892	25 13 2	10 16 3	14 16 11	25 5 6	10 9 11	14 15 7
1893	24 0 9	10 9 0	13 11 9	22 18 11	9 16 5	13 2 6
1894	23 11 9	9 19 11	13 11 10	22 7 11	8 16 5	13 11 6
1895	21 11 10	9 4 10	12 7 0	21 2 8	8 16 8	12 6 0
1896	23 5 8	10 1 11	13 3 9	23 2 2	9 19 1	13 3 1
1897	25 0 11	11 3 3	13 17 8	24 11 7	11 1 7	13 10 0
1898	25 9 3	11 3 7	14 5 8	25 6 11	11 3 1	14 3 10
1899	27 11 5	11 13 1	15 18 4	27 7 8	11 9 8	15 18 0
1900	31 5 9	13 18 10	17 6 11	30 13 8	13 7 4	17 6 4
1901	31 15 0	15 3 10	16 11 2	31 2 9	14 11 11	16 10 10
1902	31 6 0	14 3 11	17 2 1	30 16 6	13 14 8	17 1 10

The highest record of trade (excluding specie) was that for 1874, when the rate per head was £41 4s. 5d., the imports, in consequence of the large expenditure of borrowed money, amounting at that time to £24 17s. per head, against £13 14s. 8d. in 1902.

It has been customary to leave out the Maoris in estimating the sum per head, for their industries and necessities swell the volume of trade in comparatively so slight a measure that the amount per head of European population can be more truly ascertained by omitting them altogether.

Trade with different Countries, States, or Colonies.

The trade with the United Kingdom in 1902 amounted to £16,302,100, comprising 65·29 per cent. of the total.

With the Australian States, trade was done during 1902 to the value of £4,399,645; of which New South Wales claimed £1,989,786, and Victoria £2,043,546, made up as follows:—

EXPORTS FROM NEW ZEALAND.

	£
To New South Wales, 1902	1,118,193
„ Victoria, 1902	1,295,233

IMPORTS INTO NEW ZEALAND.

	£
From New South Wales, 1902	871,593
„ Victoria, 1902	748,313

The latter amounts, in each case, represent the declared values the imports into New Zealand from the States mentioned, not their export value as given in the New South Wales and Victorian returns.

Included in the exports to New Zealand from New South Wales is coal to the quantity of 126,548 tons, valued at £124,430.

Both imports from and exports to the United States in 1902 show a decrease when compared with the previous year's figures.

Of the exports to the United States in 1902 the values of the principal New Zealand products were: Coal, £2,009; kauri-gum, £322,976; hides, £1,099; sheepskins, £33,758; rabbit-skins, £5,195; sausage-skins, £37,867; onions, £770; grass-seed, £3,680; wool, £14,372; and phormium, £64,129.

The following table shows the value of the total trade with the United States for each of the past ten years, 1893 to 1902 inclusive, during which period the trade has increased considerably. But the increase is entirely on the side of the imports from those States, and especially from the Atlantic ports, from which there is a far greater output to New Zealand than from the Pacific side.

TRADE WITH THE UNITED STATES.

Year.	Imports from		Exports to		Total Trade.
	Atlantic Ports.	Pacific Ports.	Atlantic Ports.	Pacific Ports.	
	£	£	£	£	£
1893	345,743	33,635	430,842	65,706	875,926
1894	359,196	35,495	230,829	56,367	681,887
1895	351,823	42,410	298,536	18,103	710,872
1896	419,689	73,151	263,564	63,025	819,429
1897	521,939	106,105	252,013	123,083	1,003,140
1898	700,555	99,856	337,059	286,074	1,423,544
1899	687,906	87,403	387,614	45,885	1,208,808
1900	958,286	103,587	424,314	34,482	1,520,669
1901	1,174,745	240,515	332,175	186,904	1,934,339
1902	1,146,575	172,362	447,623	42,341	1,808,901

The development in the decennial period is at the rate of over 100 per cent., or an increase in value of £932,975.

The trade with India and Ceylon reached a total of £416,348, against £478,757 in 1901. The imports—tea, rice, castor-oil, wool-packs, &c.—were reckoned at £414,186, leaving a balance of only £2,162 for exports.

Trade with South Africa.

A monthly passenger and cargo service to South Africa has been established, controlled by the "New Zealand and African Steamship Company," and subsidised by the New Zealand Government. The steamers are from 9,000 to 14,000 tons measurement cargo capacity.

The contractors nominate four loading ports in this colony, but the Government may, under a condition of the contract, add to these, or substitute others. The ports of discharge are Durban, Port Elizabeth, and Capetown, but the boats must call at Fremantle, Western Australia, *en route*.

An important and increasing trade has, so far, grown out of this service, indeed it has been found necessary on a recent occasion to despatch a second steamer during the month.

To exhibit the nature and dimensions of the trade as at present, the main items comprising the cargo of the s.s. "Essex," which sailed from Wellington on the 14th June, 1903, are given: 49,046 carcases frozen mutton, 220 carcases lamb, 2,200 quarters beef, 500 sides pork, 708 cases meats, 179 cases poultry, 298 cases fish, 3,808 boxes butter, 94 cases cheese, 45,106 sacks oats, 1,472 sacks bran, 1,987 sacks potatoes, 17,535 superficial feet timber, 3,094 live sheep, 3 horses, 480 packages sundries.

Shipments of live sheep are becoming regular. The demand for poultry is greater than the supply, and practically all the frozen beef now sent from the colony is carried by this line of steamers.

Experimental shipments of timber for the Capetown railways and harbour works are being made, and some 3,000 bags of pumice for insulation have been supplied to a freezing company at the same place.

A feature of the service is the creation of a trade with Fremantle in frozen meat and live sheep.

The value of the South African trade from 1893 to 1902 is as follows:—

Year.	Imports from	Exports to	Total Trade.
	£	£	£
1893	1,563	3,779	5,342
1894	16	2,545	2,561
1895	58	10,255	10,313
1896	129	12,508	12,637
1897	87	6,795	6,882
1898	72	2,766	2,838
1899	215	90,187	90,402
1900	502	405,419	405,921
1901	386	825,476	825,862
1902	997	754,059	755,056

Trade of Australasia.

The following table gives the value of the imports and exports of what is now the Commonwealth of Australia and the Colony of New Zealand for the year 1901 :—

State or Colony.	Total Value of		Excess of Exports over Imports.	Excess of Imports over Exports.
	Imports.	Exports.		
	£	£	£	£
Queensland	6,376,239	9,249,366	2,873,127	..
New South Wales ..	26,928,218	27,351,124	422,906	..
Victoria	18,927,340	18,646,097	..	281,243
South Australia	7,371,588	8,015,889	644,301	..
Ditto, Northern Territory	106,700	302,931	196,231	..
Western Australia ..	6,454,171	8,515,623	2,061,452	..
Tasmania	1,965,199	2,945,757	980,558	..
New Zealand	11,817,915	12,881,424	1,063,509	..

In the preceding table is given the total trade inwards and outwards of each State and colony, counting twice over the value of goods produced in one State or colony and carried thence into another, and reckoning the same goods three times where they are imported from without into one State or colony and re-exported thence in the same year into another. But, in order to form a just idea of the trade of Australasia as a whole, it is necessary to eliminate the inter-state traffic altogether. From the following table the value of imports and exports exchanged between the various States has accordingly been excluded :—

EXTERNAL TRADE OF AUSTRALASIA.

Year.	Total Trade.	Imports.	Exports.	Excess of Imports.	Excess of Exports.
	£	£	£	£	£
1885 ..	72,220,444	41,136,038	31,084,406	10,051,632	..
1890 ..	75,143,818	38,451,160	36,692,658	1,758,502	..
1891 ..	84,565,778	41,325,033	43,240,745	..	1,915,712
1892 ..	75,325,933	34,529,501	40,796,432	..	6,266,931
1893 ..	67,788,738	27,925,990	39,862,748	..	11,936,758
1894 ..	65,192,202	26,063,630	39,128,572	..	13,064,942
1895 ..	67,624,317	27,425,725	40,198,592	..	12,772,867
1896 ..	74,511,262	34,420,596	40,090,666	..	5,670,070
1897 ..	83,569,568	37,862,741	45,706,827	..	7,844,086
1898 ..	85,600,442	37,310,583	48,289,859	..	10,979,276
1899 ..	97,637,194	39,990,123	57,647,071	..	17,656,948
1900 ..	104,298,717	48,351,933	55,946,784	..	7,594,851
1901 ..	109,651,267	50,506,802	59,144,465	..	8,637,663

It will be observed that in the year 1885 the excess of imports over exports for Australasia amounted to no less a sum than £10,051,632, and that five years later the excess of imports had fallen to £1,758,502. In 1891 the position was completely reversed, the exports exceeding the imports by £1,915,712. This excess increased to £6,266,931 in the following year (1892), and to £13,064,942 in 1894, but decreased to £12,772,867 in 1895, to £5,670,070 in 1896. It was £7,844,086 in 1897, £10,979,276 in 1898, and in 1899 the excess of exports over imports amounted to £17,656,948. In 1900 there was a falling-off in the value of exports, and the excess amounted to only £7,594,851, but in 1901 the balance in favour of exports was £8,637,663.

The trade per head of the population in each of the States of the Australian Commonwealth and New Zealand in 1901 was:—

TRADE PER HEAD OF THE POPULATION IN 1901.

State or Colony.	Mean Population.	Imports.	Exports.	Total Trade.
		£ s. d.	£ s. d.	£ s. d.
Queensland	505,695	12 12 2	18 5 10	30 18 0
New South Wales	1,372,145	19 12 6	19 18 8	39 11 2
Victoria	1,202,960	15 14 8	15 10 0	31 4 8
South Australia	357,556	20 12 4	22 8 4	43 0 8
Ditto, Northern Territory ..	4,624	23 1 6	65 10 3	88 11 9
Western Australia	188,603	34 4 5	45 3 0	79 7 5
Tasmania	173,606	11 6 5	16 19 4	28 5 9
New Zealand	777,968	15 3 10	16 11 2	31 15 0

But the values of the exports of the Australian States, more especially New South Wales, Victoria, and South Australia, are largely increased by the inclusion of articles the produce or manufacture of other States, colonies, and countries.

The value of home productions or manufactures exported from each State or colony in 1901, and the rate per head of mean population, were as follow:—

State or Colony.	Home Produce exported. £	Per Head of Population. £ s. d.
Queensland	9,009,696 ..	17 16 4
New South Wales	19,915,884 ..	14 10 3
Victoria	14,134,028 ..	11 14 11
South Australia	4,216,601 ..	11 15 10
Ditto, Northern Territory ..	301,709 ..	65 5 0
Western Australia	8,216,718 ..	43 11 4
Tasmania	2,933,878 ..	16 18 0
New Zealand	12,690,460 ..	16 6 3

The next table sets forth the amount of the trade of each of the above-named States and colony with the United Kingdom in 1901:—

State or Colony.	Imports from the United Kingdom.	Exports to the United Kingdom.	Total Trade with the United Kingdom.
	£	£	£
Queensland	2,474,784	3,354,854	5,829,638
New South Wales	10,102,941	7,647,963	17,750,904
Victoria	7,221,801	5,425,772	12,647,573
South Australia	2,234,982	2,288,286	4,523,268
Ditto, Northern Territory	7,745	18,661	26,406
Western Australia	2,566,162	5,625,459	8,191,621
Tasmania	628,617	833,928	1,462,545
New Zealand	6,885,831	9,295,375	16,181,206

The statement appended shows the relative importance of Australasia as a market for the productions of the United Kingdom:—

EXPORTS OF HOME PRODUCTIONS FROM THE UNITED KINGDOM, IN 1901, TO—

	£
British India and Ceylon	36,513,040
Australasia	26,955,763
Germany	23,573,785
United States	18,393,883
Cape of Good Hope and Natal	17,154,380
France	16,472,068
Holland	9,089,149
Russia	8,673,334
Belgium	8,156,203
Japan	8,132,223
Dominion of Canada	7,785,472
Sweden and Norway	7,699,985
Italy	7,612,562

The exports to other countries did not amount to £7,000,000 in any one case.

Australasia as a whole, with a population of about 4,600,000, thus takes the second place in importance for consumption of British produce, the exports thereto being two-thirds the value of similar exports to British India, with its 294,000,000 inhabitants.

Supplemental.

Value of imports and exports of the Cook and other Islands from the year 1892 to 1900 [in 1901 these islands were annexed to New Zealand]:—

Year.	From New Zealand.	From Tahiti.	Other Places.	Total.
	£	£	£	£
1892 ..	10,998	5,251	..	16,249
1893 ..	10,200	9,084	..	19,284
1894 ..	13,152	9,283	..	22,435
1895 ..	16,861	6,408	..	23,269
1896 ..	17,167	5,911	..	23,068
1897 ..	22,455	4,406	..	26,861
1898 ..	15,332	2,323	..	18,155
1899 ..	9,768	2,330	1,457	13,555
1900 ..	17,700	2,230	1,251	21,181

The value of the exports for the same period is as follows:—

Year.	From Cook Islands.	From other Places.	Total.
	£	£	£
1892 ..	15,394	4,943	20,337
1893 ..	18,703	905	19,668
1894 ..	18,937	1,728	20,665
1895 ..	19,084	1,054	20,138
1896 ..	15,486	1,333	16,819
1897 ..	21,751	2,381	24,132
1898 ..	11,209	1,408	12,617
1899 ..	11,199	3,020	14,219
1900 ..	19,310	3,069	22,379

SECTION XVII.—TRANSPORT AND COMMUNICATION.

Shipping.

The shipping entered inwards during 1902 comprised 638 vessels, of 1,089,179 tonnage; while entered outwards were 611 vessels, of 1,048,770 tons. Comparison with the figures for the previous year shows in the entries a decrease of 50 vessels and an increase of 25,905 tons, and in the clearances a decrease of 80 vessels and 27,136 tons. Of the vessels inwards, 172, of 496,203 tons, were British; 395, of 429,467 tons, colonial; and 71, of 163,509 tons, foreign. Those outwards numbered 152, of 447,351 tons, British; 385, of 437,489 tons, colonial; and 74, of 163,930 tons, foreign. Compared with the figures for 1901 there was a decrease of 3 vessels and an increase of 47,515 tons in British vessels entered, a decrease in the colonial shipping entered of 46 vessels and 32,262 tons. Foreign shipping shows a decrease of 1 in the number of vessels entered, and an increase of 10,652 tons. Of the entries in 1902, 228, of 123,186 tons, were sailing-vessels, and 410, of 965,993 tons, steamers. Of the clearances, 213, of 113,950 tons, were sailing-vessels, and 398, of 934,820 tons, steamers. The shipping inwards and outwards for ten years is given in the table following:—

Vessels entered, 1893-1902.

Year.	Total Number.			British.			Colonial.			Foreign.		
	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.
1893 ..	617	615,604	20,935	166	290,323	7,289	405	272,250	11,745	46	53,031	1,901
1894 ..	609	631,100	21,834	141	271,994	6,456	423	306,547	13,279	45	52,559	2,099
1895 ..	611	672,951	22,074	146	299,667	6,837	420	319,313	13,209	45	53,971	2,028
1896 ..	589	614,097	19,857	126	249,601	5,495	395	300,176	12,210	68	64,320	2,152
1897 ..	600	686,899	21,542	133	276,020	6,086	395	340,793	13,138	72	70,086	2,318
1898 ..	620	765,255	24,081	152	329,065	7,910	399	369,840	13,897	69	66,350	2,274
1899 ..	609	811,183	23,929	149	350,861	6,986	388	392,671	14,666	72	67,651	2,277
1900 ..	616	854,632	23,791	156	392,394	7,183	393	392,519	14,135	67	69,719	2,473
1901 ..	688	1,063,274	29,724	175	448,688	7,713	441	461,729	16,063	72	152,857	5,948
1902 ..	638	1,089,179	30,264	172	496,203	8,871	395	429,467	15,305	71	163,509	6,088

Vessels cleared, 1893-1902.

1893 ..	635	642,466	21,448	186	317,130	7,839	400	270,308	11,665	49	55,028	1,944
1894 ..	614	631,250	21,934	140	270,464	6,437	432	310,050	13,527	42	50,736	1,970
1895 ..	597	648,946	21,619	134	281,840	6,528	420	315,171	13,068	43	51,935	2,023
1896 ..	592	627,659	20,217	123	259,064	5,637	402	305,926	12,448	67	62,669	2,132
1897 ..	587	675,333	21,409	140	280,229	6,240	378	327,068	12,881	69	68,036	2,288
1898 ..	622	765,793	24,130	150	322,150	7,898	403	377,102	13,948	69	66,541	2,284
1899 ..	604	807,866	24,117	152	355,442	7,194	379	386,219	14,656	73	66,205	2,267
1900 ..	613	825,275	23,481	149	368,241	6,978	397	388,436	14,153	67	68,598	2,350
1901 ..	691	1,075,906	30,028	177	462,179	7,954	441	458,994	16,106	73	154,733	5,968
1902 ..	611	1,048,770	29,294	152	447,351	7,983	385	437,489	15,171	74	163,930	6,140

Note.—Coasting-vessels are not included in the above table.

The noticeable feature in the operations for the decennium is a considerable increase of tonnage inwards and outwards, but not in the numbers of vessels, showing that larger ships are now used than those of ten years ago.

The figures given apply to the external trade only; but in a new country such as New Zealand, as yet deficient in roads, but having an extensive seaboard and a number of good harbours, the coastal trade must be relatively very large, as is evidenced by the figures next given:—

SHIPPING ENTERED COASTWISE, 1902.

	Number.	Tons.
Sailing-vessels	4,797	306,965
Steamers	17,007	7,942,658

SHIPPING CLEARED COASTWISE, 1902.

	Number.	Tons.
Sailing-vessels	4,758	304,523
Steamers	17,011	8,005,112

The total number of vessels entered coastwise was thus 21,804, of 8,249,623 tons, an increase of 324 vessels and 405,810 tons on the figures for 1901. The total clearances coastwise were 21,769 vessels, of 8,309,635 tons, an increase of 347 vessels and 509,738 tons on the number for the previous year.

REGISTERED VESSELS.

The number and tonnage of the registered vessels belonging to the several ports on the 31st December, 1902 (distinguishing sailing-vessels and steamers), was as under:—

REGISTERED VESSELS, 31ST DECEMBER, 1902.

Ports.	Sailing-vessels.			Steam-vessels.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Auckland	194	17,639	16,488	93	12,179	7,341
Napier	8	591	578	17	1,543	844
Wellington	22	3,462	3,343	25	4,473	2,409
Nelson	7	180	180	9	820	517
Lyttelton	30	6,046	5,771	9	2,178	911
Dunedin	49	15,233	14,881	68	81,648	49,950
Invercargill	15	1,619	1,565	3	211	55
Totals	325	44,770	42,806	224	103,052	62,027

RAILWAYS.

The history and progress of railways in New Zealand was specially described in the Year-book of 1894, as was also the line partly built by the New Zealand Midland Railway Company. An account of the line belonging to the Wellington and Manawatu Railway Company was published in the Year-book for 1895.

The length of Government railways open for traffic on the 31st March, 1903, was 2,291 miles, of which 868 were situated in the North Island and 1,423 in the Middle Island.

The sections of the North Island lines consist of the Kawakawa, 8 miles; Whangarei, 23; Kaihu, 17; Auckland, 341; Gisborne–Karaka, 13 miles; and the Wellington–Napier–New Plymouth, 466 miles. The Middle Island sections comprise the Hurunui–Bluff, with branches, 1,213 miles; Westland, 112; Westport, 31; Nelson, 33; Picton, 34 miles. The total cost of construction, including Public Works loan expenditure on harbour works forming part of the railway system, has been £19,081,735 (besides £1,133,200 spent on unopened lines), and the average cost per mile of open line £8,436.

The following statement shows the number of miles of Government railways open, the number of train-miles travelled and of passengers carried, and the tonnage of goods traffic, for the past thirteen years:—

Year.	Length open.	Train-mileage.	Passengers.	Season Tickets issued.	Goods and Live-stock.*
					Tons.
1890–91	1,842	2,894,776	3,433,629	13,881	2,134,023
1891–92	1,869	3,010,489	3,555,764	16,341	2,122,987
1892–93	1,886	3,002,174	3,759,044	16,504	2,258,235
1893–94	1,948	3,113,231	3,972,701	17,226	2,128,709
1894–95	1,993	3,221,620	3,905,578	28,623	2,123,343
1895–96	2,014	3,307,226	4,162,426	36,233	2,175,943
1896–97	2,018	3,409,218	4,439,387	43,069	2,461,127
1897–98	2,055	3,666,483	4,672,264	48,660	2,628,746
1898–99	2,090	3,968,708	4,955,553	55,027	2,744,441
1899–1900 ..	2,104	4,187,893	5,468,284	63,335	3,251,716
1900–1901 ..	2,212	4,620,971	6,243,593	82,921	3,461,331
1901–1902 ..	2,235	5,066,360	7,356,136	100,778	3,667,039
1902–1903 ..	2,291	5,443,333	7,575,390	118,431	3,730,394

The traffic in local products for the past thirteen years was:—

Year.	Wool.	Timber.	Grain.	Minerals.	Horses and Cattle.	Sheep and Pigs.
	Tons.	Tons.	Tons.	Tons.	Number.	Number.
1890–91 ..	87,701	153,078	528,683	828,079	44,999	1,313,155
1891–92 ..	85,888	170,521	442,277	873,899	47,618	1,117,253
1892–93 ..	96,842	169,910	523,637	884,031	46,590	1,359,860
1893–94 ..	101,340	183,192	411,191	864,538	51,573	1,394,456
1894–95 ..	103,328	198,578	388,556	857,917	52,075	1,563,213
1895–96 ..	99,363	213,132	374,699	878,659	50,766	1,893,058
1896–97 ..	98,958	257,825	423,888	1,032,252	47,256	2,016,437
1897–98 ..	103,055	313,073	427,448	1,048,868	54,871	2,399,379
1898–99 ..	97,396	310,266	420,071	1,147,353	66,226	2,552,745
1899–1900 ..	104,621	334,677	764,033	1,218,698	76,537	2,559,836
1900–1901 ..	96,519	380,803	772,571	1,366,241	84,289	2,463,250
1901–1902 ..	101,878	427,153	813,345	1,443,792	95,384	2,780,019
1902–1903 ..	116,309	436,008	718,376	1,604,426	115,198	3,889,177

* The equivalent tonnage for live-stock has been given.

The cash revenue for the year 1902–1903 amounted to £1,974,038; and the total expenditure to £1,343,415. The net cash revenue—£630,623—was equal to a rate of £3 6s. 1d. per cent. on the capital cost; the percentage of expenditure to revenue was 68·05. The earnings on some of the lines ranged as high as £6 1s. 9d., and even £16 2s. 7d., per cent.

The particulars of the revenue and expenditure for the past thirteen years are given herewith:—

Year.	Passenger Fares.	Parcels Luggage and Mails.	Goods and Live-stock.	Rents and Miscellaneous.	Total.	Expenditure.	Net Revenue.	Percentages of Expenditure to Revenue.	Percentages Revenue to Capital Cost.		
	£	£	£	£	£	£	£	%	£	s.	d.
1890–91	353,593	38,997	690,779	38,332	1,121,701	700,703	420,998	62·47	2	18	11
1891–92	364,617	41,795	671,469	37,550	1,115,431	706,517	408,914	63·34	2	15	9
1892–93	390,619	44,801	707,785	38,316	1,181,521	732,141	449,380	61·97	3	1	0
1893–94	402,019	45,206	686,469	39,098	1,172,792	735,358	437,434	62·70	2	17	9
1894–95	385,149	43,270	683,726	38,706	1,150,851	732,160	418,691	63·62	2	14	6
1895–96	389,234	54,736	698,115	40,956	1,183,041	751,368	431,673	63·51	2	16	0
1896–97	410,160	58,084	774,163	43,751	1,286,158	789,054	497,104	61·35	3	3	10
1897–98	433,430	60,872	837,589	44,117	1,376,008	857,191	518,817	62·30	3	4	10
1898–99	475,553	66,418	882,077	45,617	1,469,665	929,737	539,928	63·26	3	5	10
1899–00	515,020	68,488	985,723	54,660	1,623,891	1,052,358	571,533	64·80	3	8	5
1900–01	544,976	72,712	1,051,694	57,854	1,727,236	1,127,847	599,389	65·30	3	9	8
1901–02	621,019	79,561	1,110,575	63,431	1,874,586	1,252,237	622,349	66·80	3	8	6
1902–03	625,698	87,273	1,189,101	71,966	1,974,038	1,343,415	630,623	68·05	3	6	1

* NOTE.—For 1895-96 and subsequent years the railways have been credited with the value of services performed for other Government departments, and debited with the value of work done for the railways by other departments.

The revenue per (average) mile of railway open during the year was £873, and the expenditure £594; equal to 7s. 3d. and 4s. 11d. per train-mile respectively.

The total number of miles travelled by trains was 5,443,333.

In addition to the above railways, there were 113 miles of private lines open for traffic on the 31st March, 1903—including the Wellington–Manawatu Railway, 84 miles.

The cost of the construction of the Wellington–Manawatu Railway is now returned as £793,575, being at the rate of £9,447 per mile. The term "cost of construction," as applied to railways, includes value of equipment, rolling-stock, &c., not merely the road-line and buildings. The gross earnings for the twelve months ended the 28th February, 1903, amounted to £111,398, and the working-expenses to £60,129, equivalent to 53·97 per cent. of the revenue.

Australasian Railways.

The following statement gives the average number of miles of Government railways open for traffic in Australasia in 1901–1902:—

Railways (State only).

State or Colony.	Year ended	Average Miles open.	Train Miles Run.	Cost of Construction of Open Lines.	Gross Receipts.	Working Expenses.	Percentage of Net Revenue to Cost.	Number of		
								Locomotives.	Vehicles.	
									Passenger.	Goods and Live-stock.
				£	£	£	%			
Queensland ..	30 June, 1902	2,801	5,666,058	20,119,143	1,382,179	992,751	1·94	362	419	7,058
New South Wales ..	30 June, 1902	2,953	11,649,059	40,565,073	3,668,686	2,267,369	3·48	518	794	12,514
Victoria	30 June, 1902	3,265	11,284,944	40,613,784	3,367,843	2,072,374	3·19	542	1,189	10,101
South Australia ..	30 June, 1902	1,882	4,226,413	14,435,784	1,097,697	724,166	2·59	351	438	6,525
Western Australia ..	30 June, 1902	1,356	4,507,919	7,410,426	1,521,429	1,256,370	3·58	274	260	5,285
Tasmania	31 Dec., 1901	*459	895,682	†3,799,098	205,791	173,400	0·85	71	171	1,439
New Zealand ..	31 Mar., 1903	2,262	5,443,333	19,081,735	1,974,038	1,343,415	3·30	372	751	12,992

* Includes 7½ miles private lines worked by Government. † State railways only.

In addition to the Government lines open for traffic in 1902, New South Wales had, in 1901, 85 miles of private railway; Western Australia, 623 miles; Tasmania, 148 miles, 7½ miles of which are worked by Government; and New Zealand, on 31st March, 1903, 113 miles.

Postal and Electric Telegraph.

There were 1,807 post-offices in New Zealand at the end of 1902.

The number of letters, letter-cards, post-cards, books, and pattern-packets, newspapers, and parcels dealt with during the year, compared with the number handled in 1901, was as under :—

	Total Number dealt with. 1902.	1901.		
Letters	56,689,256	51,544,265	5,144,991	Increase.
Letter-cards	1,025,375	1,023,295	2,080	
Post-cards	1,302,167	1,522,377	220,210	Decrease.
Books and pattern-packets	18,626,324	17,801,066	825,258	Increase.
Newspapers	18,517,276	18,973,632	456,356	Decrease.
Parcels	291,670	273,442	18,228	Increase.

The average number of letters, &c., posted per head of the population in each of the past five years was,—

	1898.	1899.	1900.	1901.	1902.
Letters and letter-cards	45·34	47·77	49·01	63·49	68·07
Post-cards	1·90	2·12	2 43	1·88	1·55
Books and parcels	19·72	21·68	21·10	21·09	21·45
Newspapers	14·77	15·13	16·17	17·81	16·79

The facilities afforded for the transmission of parcels through the Post Office to places within and without the colony have proved of much convenience to the public. The regulations admit of parcels up to 11 lb. in weight being sent to almost all the important countries of the world.

The following table shows the number of parcels exchanged with the United Kingdom, the Australian States, &c., in 1901 and 1902 :—

Country.	Number of Parcels. Received. 1901.	Received. 1902.	Despatched. 1901.	Despatched. 1902.
United Kingdom and foreign countries *vid* London	24,011	28,881	5,787	6,225
United States	8,019	4,123	833	1,085
Vancouver	221	303	131	168
Victoria	2,853	4,071	1,456	1,961
New South Wales	7,260	7,705	2,386	2,704
South Australia	284	380	245	246
Queensland	408	507	342	359
Tasmania	217	237	377	464
Western Australia	211	235	264	310
Samoa	..	*12	155	143
Rarotonga	32	†21	86	†27
Fiji	60	48	168	251
Ceylon	487	209	101	54
Uruguay	..	..	17	24
Cape Colony	814	396	537	407
Transvaal	..	..	378	‡151
Natal	§72	174	§26	64
Malta	2	..	..	..
India	..	352	*47	136
Totals	39,951	47,654	13,336	14,779

* Four months only. † Five months only. ‡ Seven months only. § Six months only.

The declared value of the parcels received from places outside the colony was £123,912, on which the Customs duty amounted to £22,737.

The number and weight of parcels dealt with from 1895 to 1902 are given. The word "parcels" in the first-named table includes the parcels herein mentioned:—

—	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Parcels, No.	176,206	186,611	197,554	204,603	223,350	239,456	273,442	291,670
Weight, lb.	582,193	654,333	676,054	698,301	765,836	794,994	928,237	1,034,342

Money-orders and Postal Notes.

The number of offices open for the transaction of money-order business at the end of 1902 was 494.

During 1902, 367,207 money-orders, for a total sum of £1,277,059 2s. 3d., were issued at the various post-offices in the colony. The money-orders from places beyond New Zealand and payable in the colony numbered 28,259, for the amount of £103,530 3s. 11d.

The number of offices open for the sale of postal notes at the end of 1902–1903 was 575: 616,264 postal notes were sold, value £191,904 13s. Commission amounted to £4,195 17s. 10d.

The notes paid numbered 610,464, value £190,374 14s. 6d.

Mail-services.

The cost of the various mail-services between England and New Zealand was, in 1902, as follows:—

San Francisco Service.	1902. £	s.	d.
Payments—			
Subsidies, &c.	22,258	0	1
Interprovincial and other charges ..	5,813	8	5
	£28,071	8	6
Receipts—			
Contributions from Fiji	96	5	7
Postages collected in the colony	13,290	2	2
	£13,386	7	9
Loss to the colony	£14,685	0	9

Peninsular and Oriental and Orient Lines Services.	£	s.	d.
Payments—			
To P. and O. and Orient Lines	3,209	11	11
Transit across Australia	156	8	2
" European Continent ..	375	4	6
Intercolonial services	1,787	10	5
	£5,528	15	0

Receipts—	£	s.	d.
Postages collected from England and from foreign offices	1,381	18	5
Postages collected in the colony	1,743	4	11
	£3,125	3	4
Loss to the colony	£2,403	11	8

The total amount of postages collected and contributions received for these services in 1902 was £16,511 11s. 1d.

The average number of days in 1902 within which the mails were delivered between London and each of the undermentioned ports in New Zealand was:—

London to—	San Francisco Service.	P. and O. Line.	Orient Line.
Auckland	30·94	37·27	39·15
Wellington	32·44	39·35	40·08
Dunedin	33·72	39·29	39·52
Bluff	34·47	38·54	38·77

Electric Telegraph.

There were 7,749 miles of telegraph-line open at the end of March, 1903, carrying 22,672 miles of wire. 4,559,304 telegrams were transmitted during the year; of these, the private and Press messages numbered 4,271,218, which, together with telephone exchange and other telegraph receipts, yielded a revenue of £222,494 16s. 6d.

There were twenty-six telephone central exchanges and forty-four sub-exchanges on the 31st March, 1903. The number of connections increased from 9,260 in March, 1902, to 10,633 in March, 1903. The subscriptions to these exchanges during the financial year amounted to £62,151 8s. 11d.

The capital expended on the equipment, &c., of the several telephone exchanges up to the 31st March, 1903, was £213,966 10s. 8d.

Pacific Cable.

"The Pacific Cable Authorisation Act, 1899," empowered the Government of New Zealand to co-operate with the Governments of Great Britain, Canada, New South Wales, Victoria, and Queensland in raising the required capital for constructing and maintaining a Pacific cable—the cable to be jointly owned and maintained by the contributing Governments; New Zealand to join such of the Australian States as were prepared to do likewise, upon the basis of a guarantee of four-ninths of the cost of construction and annual deficiency (if any) by such States, New Zealand's proportion of the guarantee not to exceed in any case one-ninth of the whole cost

Arrangements having been finally concluded, the work of construction proceeded, with the result that the cable, which was opened for traffic between New Zealand and Australia and Fiji on the 9th April of last year, was completed to Bamfield, Vancouver Island, on the 31st October following, and opened for international business on the 8th December, 1902.

The route is from Doubtless Bay, New Zealand, to Vancouver, Canada, *viâ* Norfolk Island, Fiji, and Fanning Island. The Australian connection is at Norfolk Island. The deep-sea portion of the Vancouver–Fanning Island cable is stated to be the longest in the world. It was laid in twenty days. Following the opening of the cable a much faster service between the colony, America, and Europe has resulted.

SECTION XVIII.—MINING.

THE natural mineral resources of New Zealand are very great, and have exercised in the past a most important influence on the development and progress of the colony. Gold to the value of £61,111,316 was obtained prior to the 31st December, 1902; the value of the produce for the year 1902 having been £1,951,433. In the earliest years the gold was obtained from alluvial diggings, but at the present time much is taken from gold-bearing quartz, which is distributed widely through several parts of the colony, and thus there is a much better prospect of the permanency of this industry than alluvial diggings alone could give.

The yield of silver to the end of 1902 amounted to £452,781 in value, the quantity mined in 1902 having been 674,196 oz., valued at £71,975.

Of other minerals, the value of the product to the same date amounts to £20,718,489, of which kauri-gum yielded £11,226,168, and coal, with coke, £9,200,139.

The quantities and values of precious metals and minerals obtained during the year 1902, and the total value of all mining produce since 1853, are:—

	1902.		Total Value since 1853.
	Oz.	£	£
Gold	508,045	1,951,433	61,111,316
Silver	674,196	71,975	452,781
	1,182,241	2,023,408	61,564,097
	Tons.		
Copper-ore ..	..	..	18,088
Chrome-ore ..	175	525	38,002
Antimony-ore ..	..	..	52,598
Manganese-ore ..	..	..	60,846
Hæmatite-ore ..	17	116	342
Mixed minerals ..	415	4,422	115,113
Coal	1,362,702	741,759	9,175,335
Shale	2,338	1,169	7,193
Coke (exported) ..	..	..	24,804
Kauri-gum ..	7,430	450,223	11,226,168
		£3,221,622	£82,282,586

Of the gold entered for exportation during the year ended the 31st March, 1903—viz., 527,372 oz., representing a value of £2,024,731—about 60 per cent. came out of quartz-mines; but, if the total yield of gold obtained in the colony be taken, the value of which to 31st March, 1903, is £61,561,313, about 25 per cent. came from quartz-mines, and 75 per cent. from alluvial workings.

Mineral Production (Value) of Australasia to End of 1901.

The total value of mineral production for Australasia to the end of the year 1901 is shown in the following table. The figures, except those for New Zealand, are taken from Mr. Coghlan's "Statistics of the Six States of Australia and New Zealand," 1901–1902:—

State or Colony.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New S'th Wales	49,661,815	32,341,577	5,857,073	6,601,806	39,494,844	4,299,947	138,257,062
Victoria ...	260,489,201	856,539	206,395	715,498	1,042,358	346,031	263,656,022
Queensland ...	52,751,675	788,042	2,249,692	4,693,866	2,821,989	320,410	63,625,674
South Australia	2,388,197	118,630	22,822,046	32,680	...	509,542	25,871,095
W'st'n Australia	30,149,712	11,453	326,972	198,199	150,972	414,534	31,251,842
Tasmania... ...	4,893,588	2,384,886	3,921,495	7,276,294	445,465	336,932	19,258,660
New Zealand ...	59,159,883	380,806	18,088	...	8,433,576	11,068,611*	79,060,964
Australasia ...	459,494,071	36,881,933	35,401,761	19,518,343	52,389,204	17,296,007	620,981,319

* Inclusive of kauri-gum to the value of £10,775,945.

Gold-mining.

The history of the finding of gold in this colony was briefly sketched in the Year-books for 1893 and 1894, and need not, therefore, be repeated here, but a word may be said on recent developments in mining. Great changes have taken place since the early days, when a man wanted but a pick and shovel, tin dish and cradle, to enable him to earn a livelihood on the diggings. The rich shallow gravels have been to all appearances worked out, the ground is getting deeper, the inroads of water more troublesome, and greatly improved appliances are needed in order to pump the water or wash away the masses of drift that overlie the gold-bearing layers on the bottom.

The difficulty for many years experienced in working the beds of the larger rivers has been at last overcome by the use of dredging

machinery. Dredging has not only been adopted for working river-beds, but has also been applied with advantage to alluvial flats, which cannot be otherwise profitably worked. The total number of dredges at the end of the year 1902 was: Working, 201; being built, 23; not working, 52; undergoing removal, &c., 16: total, 292.

The importance of this class of gold-mining is best illustrated by the fact that, during the five weeks ending 30th May, 1903, the quantity of gold won by 115 dredges for which returns are available was 104 oz. 17 dwt. per dredge, the average time worked by each dredge being three weeks and a half. There are many private owners, who do not make public their returns.

The following are the averages for five months of dredges that publish returns:—

				(Approximate.) Return per Dredge. Oz. dwt. gr.	(Approximate.) Average Working Period.*
4 weeks ending	January 31, 1903	..	96 dredges†	74 15 0	3 weeks.
4 „	February 28, „	..	106 „ †	83 0 0	3 „
4 „	March 28, „	..	105 „ †	74 10 0	3 „
4 „	April 25, „	..	110 „ †	79 3 0	3 „
5 „	May 30, „	..	115 „ ‡	104 17 0	3½ „

* Or periods for which returns were furnished. † Averaged for four weeks. ‡ Averaged for five weeks.

It may be calculated that 10 oz. per week will pay working-expenses—big dredges more, say 12 oz.; little dredges less, say 6 oz. to 8 oz. Repairs are very costly, in some cases up to as high as £500 per annum, in others perhaps not more than £100. If £300 allowed on the average it would probably cover cost—not, of course, of removal from one claim to another, which is often very expensive, according to distance, as from Central Otago to Waimumu or Charlton, in Southland, or from Otago to the West Coast.

An average of 15 oz. per week would probably cover working-expenses and repairs, taking small dredges with the large ones.

The recovery of gold from river-beds and wet alluvial flats is an established industry in New Zealand. The success of some of the ventures in the earlier stages of what was at first a comparatively novel form of mining led to rash speculation, but this undesirable condition has ceased to exist, and dredging is now regarded as a good field for investment.

The small amount of capital required and low working-expenses are advantages which tend to popularise dredging, and secure the working of gold-deposits which would otherwise lie untouched.

The total number of gold-miners employed in 1902 was 11,398, as against 12,732 for the previous year. In some places, more

especially in Otago, Nelson, and the West Coast, many of the miners do not depend entirely on mining, but employ a part of their time in farming and other pursuits.

In 1901 an Act was passed reducing the fee payable for a miner's right from 10s. to 5s.

The total quantity of gold entered for export during the years ending 31st March, 1902, and 31st March, 1903, for the several districts, and the total quantity and value of the gold exported from the colony from the 1st January, 1857, to the 31st March, 1903, are shown hereunder; but this does not necessarily include the whole of the gold produced, as no doubt much has been taken out of the colony from time to time by people who have evaded the duty, and a good deal has been used for making jewellery and ornaments:—

TABLE SHOWING THE QUANTITY AND VALUE OF GOLD ENTERED FOR EXPORTATION FROM NEW ZEALAND FOR THE YEARS ENDED THE 31ST MARCH, 1902 AND 1903, AND THE TOTAL QUANTITY AND VALUE FROM JANUARY, 1857, TO 31ST MARCH, 1903.

District.	Year ending 31st March, 1902.		Year ending 31st March, 1903.		Increase for Year ending 31st March, 1903.	Total Quantity and Value from January, 1857, to 31st March, 1903.	
	Quantity.	Value.	Quantity.	Value.			
	Oz.	£	Oz.	£	Oz.	Oz.	£
Auckland ..	201,861	728,498	203,158	724,892	1,297	3,055,462	11,398,344
Wellington..	..	..	..	..	..	188	706
Marlborough	277	1,108	401	1,604	124	87,500	340,902
Nelson ..	4,207	17,118	6,285	24,704	2,028	273,597	1,080,199
West Coast..	104,441	418,322	125,399	501,639	20,958	6,228,870	24,769,757
Canterbury..	19	71	..	..	— 19*	123	483
Otago ..	128,200	515,265	192,079	771,892	63,879	6,044,721	23,970,922
Totals ..	439,005	1,680,382	527,272	2,024,731	88,267	15,690,461	61,561,313

* Decrease.

It will be seen from the above table that there was last year an increase in the yield of gold of 88,267 oz. on the figures for the preceding twelve months.

Of the total quantity of gold entered for exportation last year Auckland contributed 38·53 per cent.; Marlborough, 0·08 per cent.; Nelson, 1·18 per cent.; West Coast, 23·78 per cent.; and Otago, 36·43 per cent.

Production of Australasia.

The gold yield of Australasia for 1898, 1899, 1900, and 1901, was as under:—

	1898. Oz.	1899. Oz.	1900. Oz.	1901. Oz.
Queensland ..	920,048	946,894	963,189	835,553
New South Wales ..	340,493	496,196	345,650	267,061
Victoria	837,257	854,500	807,407	789,562
South Australia ..	31,961	23,122	24,086	26,952
Western Australia ..	1,050,184	1,643,877	1,580,950	1,879,390
Tasmania	74,233	83,992	81,125	75,831
New Zealand ..	280,175	389,558	373,616	455,561
	3,534,351	4,438,139	4,176,023	4,329,910

The increase for the period is 795,559 oz. The mint value of Australasian gold averages £3 16s. per ounce, and a comparison of value is therefore as follows: 1898, £13,430,533; 1899, £16,864,927; 1900, £15,868,887; 1901, £16,453,658: increase, 1898 to 1901, £3,023,125.

Gold-production of the World for each of the Five Years 1897–1901.

(From a table compiled in the Government Statistician's Office, Perth, Western Australia.)

Countries and Continents.	1897.	1898.	1899.	1900.	1901.
Australasia.	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
Western Australia	603,847	939,490	1,470,605	1,414,311	1,703,416
Victoria	765,365	788,429	789,368	751,211	731,276
Queensland	601,060	647,487	668,150	676,058	598,412
New Zealand	230,759	254,416	356,231	338,911	412,876
New South Wales	265,593	292,940	412,412	281,214	216,888
Tasmania	68,093	68,624	77,110	74,445	69,491
South Australia	28,285	22,377	18,633	19,418	21,946
New Guinea, &c.	5,890	5,627	10,402	7,560	8,693
Total ounces ..	2,568,892	3,019,390	3,802,911	3,563,128	3,762,998
Total value £	10,911,960	12,825,553	16,153,739	15,135,206	15,984,200
Africa.					
The Transvaal	2,743,518	3,823,367	3,637,713	348,761	258,033
Other countries and colonies	48,479	57,579	130,257	194,049	256,449
Total ounces ..	2,791,997	3,880,946	3,767,970	542,810	514,482
Total value £	11,859,649	16,485,211	16,005,319	2,305,710	2,185,381
America.					
United States of America ..	2,774,935	3,118,398	3,437,210	3,829,897	3,880,578
Canada	291,582	666,445	1,028,620	1,350,176	1,183,465
Mexico	481,362	587,548	281,471	455,204	499,725
Columbia	107,736	109,473	89,231	57,804	100,145
South America	394,584	414,114	493,456	563,045	584,786
Total ounces ..	4,050,199	4,895,978	5,329,988	6,256,126	6,248,699
Total value £	17,204,152	20,796,793	22,640,350	26,574,334	26,542,786

Gold-production of the World, 1897–1901—continued.

Countries and Continents.		1897.	1898.	1899.	1900.	1901.
Europe.		Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
Russia		1,073,798	1,073,525	1,083,543	1,072,434	1,253,592
Other European countries ..		214,280	203,844	203,446	230,400	210,873
Total ounces ..		1,288,078	1,277,369	1,286,989	1,302,834	1,464,465
Total value	£	5,471,407	5,425,919	5,466,782	5,534,087	6,220,652
Asia.						
British India		369,154	378,674	405,045	444,585	452,743
China		298,486	261,655	269,783	208,031	231,058
Other Asiatic countries ..		88,584	99,630	157,751	207,864	273,798
Total ounces ..		756,224	739,959	832,579	860,480	957,599
Total value	£	3,212,235	3,143,146	3,536,571	3,655,087	4,067,622
The World.						
Total ounces		11,455,390	13,813,642	15,020,437	12,525,378	12,948,243
Value, pounds sterling	£	48,659,403	58,676,622	63,802,761	53,204,424	55,000,641

The Cyanide Process.

By a statute passed in December, 1897, and termed "The Cyanide Process Gold-extraction Act, 1897," an agreement was approved by Parliament under which the Government arranged to purchase the patent rights in New Zealand of the Cassel Gold-extracting Company, thus rendering the said patent rights available for mining purposes at reasonable rates of royalty. The process used under the patent is what is commonly known as the cyanide process, and the operation of the Act should prove highly important in the development of low-grade ores, and otherwise promote the mining industry. The royalties received by the Government up to the 31st March, 1903, amounted to £5,586 15s. 2d. The payment of royalties will cease when the total amount disbursed for the purchase of the patent rights has been repaid to the Consolidated Fund.

The Waihi Gold-mine.

At the annual meeting of the Waihi Gold-mining Company held at London in April last the chairman remarked:—

"At the last annual meeting I claimed the year 1901, which we were then dealing with, to be the record year in our history. It was our best year up to that point. It was notable, among other things, for that year's bullion return of £461,000, an increase of £144,000 upon the previous year's return. We became producers of bullion in 1890 with a sum of £13,628. Every year since, with unfailing regularity, we have produced an increased amount, until in 1902 we have recorded a return of £521,574, or £60,000 better than 1901, making an increased realisation of upwards of £200,000 in two years, so that the bullion return of 1902 has made that year the record year; but the monthly returns of this current year seem to indicate that 1903 may yield an improved return upon the large yield of 1902."

Wet and Dry Crushing (at Waihi).

The mine-manager, in his report, gives the experience in respect of the Waihi Mine:—

"The gold found in our lodes is very fine, and intimately mixed with the stone. The finer the stone can be ground, the more gold is liberated. Wet crushing prevailed at Waihi many years before the Waihi Company was formed, and tens of thousands of tons of Martha ore were treated there by wet crushing, in which process the best results did not give a saving of 30 per cent. of the assay value of the gold. This result did not pay the cost of mining and milling, and wet crushing of Waihi ore, after ample trial for upwards of ten years, proved a complete failure. The ore used then was as good and as rich as that we are crushing now, but no process then known in New Zealand would save the gold. The use of solutions of cyanide for gold-saving was then unknown, and by the ordinary wet-crushing process this fine gold was carried away by the water. The mine was therefore a failure. After it came into our hands, in order to solve these questions, specimens of our ore were sent to experts in America, and I went there myself. After investigation we found that the Americans had met with the same difficulties with similar fine gold at several of their mills; the water had carried the gold away as it had done with us, and so the ore had to be crushed dry and very fine—the finer the better. By the adoption of dry crushing at Waihi, and afterward treating the finely ground ore in Howell's pans with quicksilver, we saved over 60 per cent. of the gold. This was a great step in advance, and enabled us to pay a small dividend; but the discovery which was soon after made of the use of cyanide of potassium in gold-saving enabled us to increase our saving of gold to about 90 per cent. of the assay value. Here, then, in dry crushing we had found the only process which then met the requirements of our case, saved a large percentage of the gold, and was applicable to the abundant supplies of oxidized ores which were contained in the mine. Had oxidized ore continued downwards dry crushing would have continued at Waihi; but the intrusion of sulphide ore in the lower levels raised a practical difficulty, for when sulphide ore got into the cyanide-vats it interfered with our extraction, and losses of gold followed. This difficulty ultimately led to the present system, but only after a series of inexpensive experiments made in small experimental plants at Waihi. We have not vacillated; we have boldly grappled with great difficulties. We obtained and imported dry-crushing machinery from America, and with it saved the situation and pulled Waihi into the front mining rank. When cyanide became a factor in gold-saving we purchased the right to use it for this company, and have been greatly benefited by its use; and now we believe we have, at a comparatively small cost, the most complete and permanent plant in the Southern Hemisphere, and one entirely suitable for the requirements of our mine. I make no apology for this somewhat lengthened notice of wet and dry crushing. *The subject is of the highest importance.* You will see from what I have said how deliberate and careful we have been, *and how essential it is that the facts connected with this vital question should be fully known.* While we have two processes working side by side at our mills the expense of treatment has been greater than if we had only one kind of plant. Now that we have only one mode of treatment at all the mills we expect to obtain two results—(1) cheaper treatment, and (2) to be able to treat a much larger quantity of ore, and so secure larger bullion returns. We do not expect a better extraction, but so far we have obtained good results, and we hope for improved extraction from time to time."

Coal-mining.

The extent of the coal-measures in New Zealand will make coal-mining one of the large industries in the colony, especially on the west coast of the Middle Island, where bituminous coal exists equal, if not superior, in quality to coal of the same class in any part of the world.

The progressive increase in the output of coal from 1878 to the end of 1902 is shown below:—

Year.	Raised in the Colony.		Imported.	Total raised in the Colony and imported per Annum.	Exported (excluding Coal for Fuel by Ocean Steamers).	Total Consumption of Coal within Colony.	Yearly Increase in Consumption within the Colony.
	Total.	Yearly Increase.					
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1878 ..	162,218	..	174,148	336,366	3,921	332,445	..
1879 ..	231,218	69,000	158,076	389,294	7,195	382,099	49,654
1880 ..	299,923	68,705	123,298	423,221	7,021	416,200	34,101
1881 ..	337,262	37,339	129,962	467,224	6,626	460,598	44,398
1882 ..	378,272	41,010	129,582	507,854	4,245	503,609	43,011
1883 ..	421,764	43,492	123,540	545,304	7,172	538,132	34,523
1884 ..	480,831	59,067	148,444	629,275	6,354	622,921	84,789
1885 ..	511,063	30,232	130,202	641,265	2,371	638,894	15,973
1886 ..	534,353	23,290	119,873	654,226	2,862	651,364	12,470
1887 ..	558,620	24,267	107,230	665,850	12,951	652,899	1,535
1888 ..	613,895	55,275	101,341	715,236	27,678	687,558	34,659
1889 ..	586,445	-27,450*	128,063	714,508	39,290	675,218	12,340
1890 ..	637,397	50,952	110,939	748,336	33,404	714,932	39,714
1891 ..	668,794	31,397	125,318	794,112	29,093	764,019	49,087
1892 ..	673,315	4,521	125,453	798,768	28,169	770,599	6,580
1893 ..	691,548	18,233	117,444	808,992	24,288	784,704	14,105
1894 ..	719,546	27,998	112,961	832,507	25,449	807,058	22,354
1895 ..	726,654	7,108	108,198	834,852	26,151	808,701	1,643
1896 ..	792,851	66,197	101,756	894,607	27,974	866,633	57,932
1897 ..	840,713	47,862	110,907	951,620	26,639	924,981	58,348
1898 ..	907,033	66,320	115,427	1,022,460	18,348	1,004,112	79,131
1899 ..	975,234	68,201	99,655	1,074,889	14,146	1,060,743	56,631
1900 ..	1,093,990	118,756	124,033	1,218,023	36,699	1,181,324	120,581
1901 ..	1,227,638	133,648	149,764	1,377,402	77,563	1,299,839	118,515
1902 ..	1,362,702	135,064	127,853	1,490,555	110,666	1,379,889	80,050

* Decrease.

It will be seen from the above that, with the exception of 1889, there has been a steady increase in the output of coal from the mines in the colony year after year since records have been kept by the Mines Department. The yearly increase in output is principally due to the growing demand for consumption within the colony. During a period of twenty-five years the annual consumption of coal in New Zealand has increased to the extent of 1,047,444 tons, showing that new industries are quickly springing up, requiring fuel for generating motive-power.

The total output from the mines last year was 1,362,702 tons, as against 1,227,638 tons for 1901, an increase of 135,064 tons. The coal imported from other countries was 127,853 tons, against 149,764 tons in 1901, a decrease in the importation last year of 21,911 tons. The imports were 126,548 tons from New South Wales, 1,300 tons from Victoria, and 5 tons from the United Kingdom. The total export of coal was 192,104 tons, of which 188,677 tons

were colonial produce, and 3,427 tons imported coal from other countries. Of the coal exported, 81,438 tons were for coaling direct steamers trading between the colony and the United Kingdom, and has been treated as coal consumed within the colony, these steamers trading wholly between New Zealand and Great Britain. Taking, therefore, the output from the mines and the coal imported, there is a total of 1,490,555 tons, of which 110,666 tons were exported, leaving the consumption within the colony last year 1,379,889 tons, as against 1,299,839 tons for 1901, an increased consumption of 80,050 tons.

The largest increase in the output last year was in the Westport district—namely, 73,405 tons. There was also an increased production from the mines in the Otago District of 18,988 tons, in the Southland district of 11,487 tons, in the Greymouth district of 10,426 tons, in the Waikato district of 7,455 tons, in the Kawakawa and Hikurangi district of 7,308 tons, in the Reefton district of 2,658 tons, in the Malvern district of 3,347 tons, in the Miranda district of 3,063 tons, in the Mokau district of 737 tons; but there was a decline in the West Wanganui district of 2,208 tons, and in the Whangarei, Kamo, Ngunguru, and Whauwhau district of 1,602 tons.

The quantities of coal produced in each district are as under:—

Name of District.	Output of Coal.		Increase or Decrease.	Approximate Total Output of Coal up to the 31st December, 1902.
	1902.	1901.		
	Tons.	Tons.	Tons.	Tons.
Kawakawa and Hikurangi ..	60,606	53,298	+ 7,308	1,250,424
Whangarei, Kamo, Ngunguru, and Whauwhau	32,155	33,757	− 1,602	499,774
Waikato	91,541	84,086	+ 7,455	1,342,795
Mokau	4,250	3,513	+ 737	33,784
Miranda	3,493	430	+ 3,063	3,923
Pelorus	..	..	..	711
West Wanganui	..	2,208	− 2,208	55,183
Westport	528,462	455,057	+73,405	4,710,012
Reefton	8,760	6,102	+ 2,658	99,006
Greymouth	216,594	206,168	+10,426	3,299,882
Malvern	19,445	16,098	+ 3,347	418,929
Timaru	..	..	..	10,657
Otago	308,310	289,322	+18,988	4,670,969
Southland	89,086	77,599	+11,487	747,161
Totals	1,362,702	1,227,638	+135,064 Net.	17,143,210

The following table, constructed from "Laboratory Reports of the Geological Survey" (Sir J. Hector) gives the composition of samples of New Zealand coals freshly taken from the principal mines:—

Number.	Description.	Locality.	Analysis.				Evaporative Power.*	
			Fixed Carbon.	Hydrocarbon.	Water.	Ash.	1.	2.
1	Anthracite ..	Acheron, Canterbury ..	84·12	1·96	1·80	12·12	10·93	18·50
2	Bituminous ..	Coalbrookdale ..	74·83	20·50	1·16	3·51	9·70	16·45
3	" ..	"	70·00	22·15	2·52	5·33	9·10	15·40
4	" ..	Banbury	69·97	25·71	0·99	3·33	9·09	15·38
5	Altered brown coal	Malvern Hills ..	68·54	19·89	4·15	7·42	8·27	12·50
6	Bituminous ..	Tyneside	65·59	29·18	0·82	4·41	8·52	13·55
7	Glance coal ..	Rakaia Gorge ..	64·51	21·27	6·76	7·46	8 30	13·20
8	Bituminous ..	Wallsend	62·87	31·64	1·66	3·83	8·17	13·82
9	" ..	Grey River	62·37	29·44	1·99	6·20	8·01	13·22
10	Pitch coal ..	Kawakawa	61·16	28·00	2·51	8·33	7·95	12·55
11	Bituminous ..	Preservation Inlet ..	60·88	28·60	4·33	6·19	7·91	12·80
12	Pitch coal ..	Blackball, Grey River	60·20	29·97	8·01	1·82	7·82	12·20
13	Bituminous ..	Mokihinui	59·75	32·14	3·97	4·14	7·76	11·80
14	" ..	Coalpit Heath ..	58·81	38·98	1·02	1·19	7·64	12·96
15	" ..	Mokihinui	57·92	34·94	3·96	3·18	7·50	12·75
16	" ..	Brunner Mine ..	56·62	35·68	1·59	6·11	7·36	12 46
17	" ..	" ..	56·21	37·73	1·50	4·56	7·30	12·36
18	" ..	Westport	56·01	37·17	2·60	4·22	7·28	12·30
19	" ..	Mokihinui	55·59	38·86	3·16	2·39	7·20	12·22
20	" ..	Brunner	54·16	35·85	2·50	7·49	7·04	11·91
21	Altered brown coal	Malvern Hills ..	53·29	32·04	12·65	2·02	6·92	11·50
22	Bituminous ..	Wallsend	53·10	35·47	1·41	10·02	6·90	11·68
23	" ..	Otamataura Creek ..	52·89	36·63	2·19	8·29	6·90	11·70
24	" ..	Near Cape Farewell ..	51·37	38·72	4·38	5·53	6·31	11·60
25	Pitch coal ..	Kawakawa	50·15	42·63	4·18	3·04	6·50	11·80
26	Glance coal ..	Whangarei	50·11	38·68	8·01	3·20	6·50	11·75
27	Pitch coal ..	Kamo	50·01	37·69	9·61	2·69	6·50	11·17
28	Brown coal ..	Malvern Hills ..	49·99	35·42	11·79	2·80	6·49	10·90
29	"	Fernhill	49·95	36·95	12·00	1·10	6·49	10·99
30	" ..	Allandale	47·31	34·26	12·41	6·02	6·15	10·96
31	" ..	Kaitangata	46·48	33·48	14·66	5·38	6·04	10·22
32	" ..	Shag Point	46·21	32·65	16·02	5·12	6·00	10·16
33	" ..	Homebush	44·92	36·00	15·83	3·25	5·83	9·87
34	Pitch coal ..	Hikurangi, Whangarei	44·50	47·00	5·99	2·51	5·78	9·79
35	Brown coal ..	Hokonui	44·28	38·22	16·50	1·00	5·75	9·77
36	" ..	Kaitangata	44·11	38·32	15·44	2·13	5·74	9·96
37	" ..	Nightcaps	43·62	33·68	18·33	4·37	5·67	9·59
38	Pitch coal ..	Shag Point	43·19	30·05	15·82	10·94	5·61	9·52
39	Brown coal ..	Springfield	42·68	33·66	18·65	5·01	5·55	9 38
40	" ..	Orepuki	42·64	36·26	14·44	6·66	5·54	9·38
41	" ..	Kaitangata	38·29	32·43	17·50	11·78	4·87	8·32
42	" ..	Shag Point	35·76	30·86	13·22	20·16	4·64	7·85
43	" ..	Allandale	34·72	41·43	18·99	4·86	4·51	7·63
44	Pitch coal ..	Grey River	34·72	56·48	6·20	2·60	4·51	7·63
		FOR COMPARISON.						
	Newcastle, N.S.W.	Best	58·33	34·17	1·83	5·67	7·50	12·82
	"	Worst	53·34	26·66	3·33	16·67	6·90	11 72

*The second column headed "Evaporative Power" is obtained by the use of a multiple computed from the results of Professor Liversedge's experiments upon the coals of New South Wales. The multiple used for the first column is the one which has long been generally used for computing the evaporative power of coals; but, to prevent any unfair and prejudicial comparison of our coals with those of New South Wales, the second column is given.

As regards the quality of the coal, it cannot be surpassed. The late Sir John Coode, in his presidential address to the Institute of Civil Engineers, London, stated: "The bituminous coal found on the west coast of the Middle Island is declared by engineers to be fully equal, if not superior, to the best description from any part of the world."

The quantity of each class of coal produced in 1901 and 1902 was:—

Class of Coal.	Output of Coal.		Increase.	Approximate Total Output of Coal up to the 31st December, 1902.
	1901.	1902.		
	Tons.	Tons.	Tons.	Tons.
Bituminous and semi-bituminous	754,953	845,046	90,093	9,546,823
Pitch	14,584	25,245	10,661	1,837,956
Brown	405,152	427,172	22,020	5,151,271
Lignite	52,949	65,239	12,290	607,160
Totals	1,227,638	1,362,702	135,064	17,143,210

It has been computed that to deliver coal at the pit-mouth costs in labour 6s. a ton. The number of persons employed in all the coal-mines last year was 2,885, and the output of coal 1,362,702 tons: the average earning for each person would thus be £141 14s. per annum, or about £2 14s. 6d. per week.

Petroleum in the Middle Island.

For some years slight exudations of petroleum have been noticed in the locality of Lake Brunner, between Greymouth and the mouth of the Otira Gorge.

It has been found that when shallow holes have been dug and allowed to fill with water small quantities of crude petroleum could be skimmed off the top of the water. This has led to further investigation, and several leases have been taken up with a view to prospecting for the oil in quantity. Boring operations have been commenced by the Kotuku Oil Association and the Lake Brunner Oil Company.

Crude petroleum was also obtained in a borehole near Dobson (Greymouth). This bore was one of a series put down to prove the coal-measures.

Phosphate Rock.

Fairly extensive deposits of phosphate rock have been discovered as a fringe to the limestone at Clarendon, near Milton, Otago. The Ewing Phosphate Company (Limited) has been formed, and operations of quarrying and burning on a commercial scale have been undertaken. After burning, the rock is crushed and chemically treated. The value of this phosphate as a fertiliser has been satisfactorily proved, and there is every indication of a growing industry

in quarrying the rock and preparing it for use. With such a valuable material at our very doors, there is no doubt that in future the importation of phosphate manures will cease, or at least be greatly reduced, whilst the question of export from this colony is within the range of possibility.

State Coal-mines.

A considerable amount of development and prospecting work was undertaken during the year 1902 at the Point Elizabeth property near Greymouth and the Seddonville Colliery in the Westport district. The tunnels being driven to win the coal are approaching completion, and other necessary works are well advanced.

Other Metals or Minerals.

Very little has been done in the colony to prospect and develop mines other than for gold and silver. The only exports last year of metalliferous products, excluding gold and silver, were 231 tons of auriferous ore, 175 tons of chrome-ore, 100 tons of sulphur, 39 tons of scheelite-ore, 17 tons of hæmatite, and small parcels of other minerals, representing an aggregate value of £5,063.

Kauri-gum.

The quantity of kauri-gum exported last year was 7,430 tons, as against 7,541 tons for 1901. Last year's produce (£450,223) gave an average value of about £60 11s. 11d. per ton, while for 1901 the average was £59 3s. 2d. per ton.

SECTION XIX.—AGRICULTURE.

UNTIL 1895 the agricultural statistics were collected and compiled by the Registrar-General, under authority of "The Census Act, 1877," annually in the month of February, except in census years, when the collection was made with the enumeration of the people. Under this Act statistics of the acreage in grass and in all kinds of cultivation were taken, and at the same time the estimated yields of all the principal crops were obtained from the farmers themselves.

By the Agricultural and Pastoral Statistics Act, passed in 1895, the duty of collecting the returns devolved upon the Department of Agriculture. The plan now adopted under the Act of 1895 is similar to that used in the United Kingdom, the account of land laid down in crop being made up much earlier than formerly, while estimates of produce are made after the results of threshing are known.

Statistics of the land in cultivation were accordingly collected in October, 1902, and an interim return of the compiled results was published in detail in the *New Zealand Gazette* of the 18th December, 1902, while the corrected acreages under each description of crop were made public on the 19th February following. A summary of the particulars then given is shown in the accompanying tables, with the finally corrected statements of yield of the principal crops; but in comparing these figures with the results obtained in former years it must be remembered that, under the new Act, statistics of the acreage and crops of land held and cultivated by Maoris are included, whereas previously information about the farming carried on by Maoris was obtained only when a census of the Native race was taken.

Full remarks on the progress of agriculture in New Zealand, in respect of all its features in detail, are supplied in the special article devoted to the subject which appears as the first of Section II., in Part III.

Acreage and Actual Yield in Principal Corn-crops, 1903.

Provincial Districts.	Wheat.			Oats.			Barley.			Maize.			Rye.		
	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.
Auckland	2,599	29·74	77,027	7,063	29·58	208,584	893	35·44	31,646	10,983	50·75	557,405			
Taranaki	1,075	40·00	43,000	5,390	42·00	226,380	633	41·00	25,953	101	35·00	3,535			
Hawke's Bay ...	701	26·74	18,750	5,914	35·08	207,434	1,259	37·95	47,778	723	55·00	39,765			
Wellington ...	5,969	36·79	219,610	27,881	42·13	1,174,861	1,514	35·44	53,660	212	30·00	6,360			
Marlborough ...	3,750	30·00	112,500	2,903	39·00	113,217	6,522	35·00	228,270	...	...	...	1,279	30·00	38,370
Nelson	1,666	31·96	53,252	5,068	43·66	221,245	3,237	34·58	111,937	17	32·00	544			
Westland	...	...	...	9*	...	...	...	...	...	...	...	...			
Canterbury ...	135,907	39·24	5,333,588	199,346	49·03	9,773,662	9,553	50·06	478,197	2*	...	...			
Otago	42,688	37·48	1,600,188	230,082	42·77	9,841,925	4,310	36·84	158,791	...	...	...			
Totals	194,355	38·37	7,457,915	483,659	45·00	21,766,708	27,921	40·69	1,136,232	12,088	50·48	607,609	1,279	30·00	38,370

*Not included in the averages.

NUMBER OF ACRES UNDER CULTIVATION IN EACH PROVINCIAL DISTRICT, 1903.

Provincial Districts	In Grass or Clover, sown after Land ploughed	In Grass, surface-sown: Land not ploughed.	In Hay, included in either or both of the Previous Columns.	In Bare Fallow.	In Grain-crops.	In Green and other Crops.	In Garden	In Orchard or Vineyard.	Total in Grass, Crop, and Fallow.	In Plantations of Forest Trees.	Tussock or Native Grass, and Unimproved.
Auckland ..	612,503	1,517,041	14,328	11,578	23,698	97,318	3,850	11,978	2,277,966	10,093	3,513,607
Taranaki ..	155,466	634,644	6,728	106	7,458	16,165	871	850	815,560	1,186	237,960
Hawke's Bay ..	401,415	1,376,773	8,892	198	8,921	29,401	1,136	1,505	1,819,349	4,406	1,449,310
Wellington ..	276,701	2,323,928	11,443	1,942	37,373	57,379	2,317	3,703	2,703,343	3,982	1,145,629
Marlborough ..	93,281	283,818	1,525	196	15,376	19,015	260	481	412,427	1,438	1,889,710
Nelson ..	116,508	337,798	3,143	367	10,832	29,283	397	3,033	498,218	1,760	1,546,368
Westland ..	9,424	49,479	346	..	42	997	65	124	60,131	7	494,641
Canterbury ..	1,443,066	414,137	13,655	9,674	354,028	254,124	4,951	3,211	2,483,191	25,162	3,980,272
Otago ..	1,449,982	312,251	9,282	20,433	278,955	264,626	3,785	2,306	2,332,338	5,754	8,173,639
Totals ..	4,558,346	7,249,869	69,342	44,494	736,683	768,308	17,632	27,191	13,402,523	53,788	22,431,136

ACREAGE UNDER SOWN GRASSES, AND CULTIVATION GENERALLY, FOR EACH COUNTY, AS ON THE 15TH OCTOBER, 1902.

Counties.	In Sown Grasses, after having been ploughed.	In Sown Grasses, not previously ploughed.	Land broken up but not under Crop.	Total under Crop.	In Garden.	In Orchard.	Plantations of Forest Trees.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Mongonui	6,997	24,026	242	1,225	.83	172	4
Whangaroa ..	695	4,149	1	194	30	103	1
Bay of Islands ..	5,647	35,560	145	1,011	76	314	20
Hokianga	433	21,949	9	754	134	316	47
Rodney	11,354	83,677	647	1,114	144	1,153	128
Whangarei ..	23,225	92,052	220	2,194	129	1,217	437
Otamatea	5,909	64,724	347	556	58	367	42
Hobson	837	59,484	700	950	208	233	160
Waitemata ..	22,201	33,520	1,284	1,606	349	2,166	256
Eden	16,573	4,607	150	1,473	1,052	689	322
Manukau	108,606	93,585	5,149	21,272	397	1,471	807
Coromandel ..	2,354	9,619	40	454	58	111	18
Thames	4,697	8,055	67	1,051	70	412	14
Ohinemuri ..	6,770	10,507	49	1,469	267	136	48
Waikato	78,456	30,616	496	11,391	74	556	4,817
Raglan	15,218	87,466	125	3,689	83	223	41
Waipa	61,153	10,292	295	14,090	134	629	624
Piako	120,420	55,232	556	23,845	116	309	1,086
West Taupo and Kawhia	16,040	65,358	322	4,523	42	97	177
East Taupo and Rotorua	4,218	6,404	162	1,164	24	65	481
Tauranga	30,737	18,748	215	8,815	100	439	248
Whakatane ..	5,866	9,130	60	2,983	8	45	27
Opotiki	12,564	10,786	243	4,077	30	78	8
Waiapu	16,755	180,745	..	2,741	18	140	8
Cook	34,778	496,750	54	8,375	166	537	272
Wairoa	19,778	262,759	6	2,322	153	180	128
Hawke's Bay ..	192,314	414,708	83	19,398	646	801	1,843
Waipawa	109,109	307,606	36	11,207	201	218	1,633
Woodville	3,763	71,759	40	1,017	17	201	61
Patangata and Weber	76,451	319,941	33	4,378	119	105	741
Clifton	13,018	51,913	..	2,433	103	71	25
Taranaki and Egmont	53,758	149,790	9	6,914	345	414	252
Stratford	1,269	165,360	..	910	24	16	35
Hawera	50,537	147,536	52	8,269	321	137	277
Patea	36,884	120,045	45	5,097	78	212	597
Waitotara	21,614	84,085	..	3,299	207	228	171
Wanganui and Waimarino	15,902	176,298	39	4,207	221	236	229
Rangitikei ..	57,174	237,645	156	16,047	182	428	1,025
Kiwitea	2,194	147,624	26	2,900	37	165	44
Pohangina ..	171	83,826	..	453	16	120	2
Oroua	8,787	86,198	22	6,591	79	329	178
Kairanga	10,354	76,524	24	6,340	165	467	182
Manawatu ..	50,335	50,059	547	14,803	67	159	261
Horowhenua ..	9,169	97,807	28	3,080	163	384	64
Hutt	7,568	166,606	35	1,996	612	322	326
Featherston ..	44,948	175,416	253	11,053	89	127	595
Wairarapa South ..	22,286	186,922	483	9,332	96	153	282

ACREAGE UNDER SOWN GRASSES, ETC.—*continued.*

Counties.	In Sown Grasses, after having been ploughed.	In Sown Grasses, not previously ploughed.	Land broken up but not under Crop.	Total under Crop.	In Garden.	In Orchard.	Plantations of Forest Trees.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres	Acres.
Masterton	21,361	304,866	156	11,735	187	212	398
Castlepoint ..	2,699	96,823	123	497	23	45	124
Akitio	273	108,814	30	231	78	42	34
Pahiatua	1,258	139,921	20	1,327	62	243	46
Eketahuna ..	608	62,653	..	588	20	66	17
Mauriceville ..	..	41,841	..	273	13	27	4
Marlborough ..	61,363	124,571	139	29,296	155	282	1,191
Sounds	2,871	98,489	50	1,418	81	173	43
Kaikoura	29,047	60,758	7	3,677	24	26	204
Collingwood ..	3,335	36,382	1	1,339	19	279	7
Waimea	30,291	164,864	242	21,488	226	2,383	259
Buller	899	6,349	..	151	49	139	..
Inangahua ..	4,863	29,056	54	859	16	93	2
Amuri	51,535	97,530	70	7,982	64	31	1,122
Cheviot	25,585	3,617	..	8,296	23	108	370
Grey	4,292	18,482	..	460	33	76	7
Westland	5,132	30,997	..	579	32	48	..
Ashley	249,200	140,981	2,494	89,963	659	444	2,596
Selwyn	297,165	25,788	1,970	139,682	2,167	1,357	6,483
Akaroa and Mount Herbert	24,839	161,566	345	3,375	147	378	359
Ashburton ..	396,981	29,499	1,529	174,687	689	377	11,315
Geraldine	130,937	11,727	801	57,918	233	242	1,680
Levels	86,028	1,285	221	43,427	418	241	1,389
Waimate	201,547	39,837	2,214	82,803	569	141	746
Mackenzie ..	56,369	3,454	100	16,297	69	31	644
Waitaki	197,291	35,807	1,592	68,640	382	201	958
Waihemo	33,589	4,880	254	10,511	81	69	122
Waikouaiti ..	18,903	46,302	95	7,021	64	102	114
Peninsula	2,519	13,601	17	1,633	195	39	59
Taieri	86,914	13,737	356	27,359	597	351	414
Bruce	104,028	5,338	294	38,493	173	77	347
Clutha	175,632	31,143	1,195	53,616	443	96	511
Tuapeka	101,904	18,908	1,582	37,113	256	427	1,256
Maniototo	46,691	2,633	325	20,035	221	19	204
Vincent	20,037	2,527	1,355	13,360	139	237	93
Lake	9,636	6,926	3,370	11,877	108	91	237
Southland	494,659	81,863	8,817	195,954	942	498	1,096
Wallace and Fiord ..	158,142	48,187	1,181	57,957	170	96	340
Stewart Island ..	37	399	..	12	14	3	3
Total	4,558,346	7,249,869	44,494	1,504,991	17,632	27,191	53,788

The extent of land in cultivation (including sown grasses and land broken up but not under crop) amounted to 13,402,523 acres. Of this area, land under artificial grasses comprised 88·10 per cent.; land under grain-crops, 5·50 per cent.; land under root and green crops, 5·73 per cent.; land in garden and orchard, 0·34 per cent.; and land in fallow, 0·33 per cent. Full details for the last sixteen years are tabulated.

NUMBER OF ACRES IN GRASS, UNDER EACH CLASS OF CROP, AND IN BARE FALLOW, 1888 TO 1903.

Year.	In Grass or Clover, sown after Land ploughed.	In Grass or Clover, surface-sown: Land not ploughed.	In Hay, included in either or both of the Previous Columns.	In Bare Fallow.	In Grain-crops.	In Green and other Crops.	In Garden.	In Orchard or Vineyard.	Total in Grass, Crop, Fallow, Garden, and Orchard.	In Plantations of Forest Trees.
1888	2,884,007	3,053,052	67,812	154,266	738,603	454,824	8,608	16,329	7,309,689	28,565
1889	2,941,888	3,337,423	50,656	142,747	793,866	454,243	8,561	15,246	7,693,974	33,938
1890	3,027,912	3,497,137	45,889	149,979	826,505	513,893	8,568	15,771	8,039,765	28,928
1891	3,250,543	3,715,675	44,045	210,509	703,329	582,439	9,810	17,047	8,489,352	35,310
1892	3,327,755	4,076,126	46,652	140,454	769,778	579,112	9,608	19,627	8,922,460	38,723
1893	3,611,393	4,650,652	61,811	154,254	753,091	544,355	9,763	20,085	9,743,593	40,401
1894	3,865,348	4,833,549	60,740	142,342	669,850	551,962	9,951	21,109	10,094,111	39,826
1895	3,908,581	4,921,136	56,614	140,494	560,179	597,686	10,263	21,401	10,159,740	55,386
1896	4,254,983	5,030,247	96,818	58,039	674,850	680,750	17,749	19,362	10,735,980	43,246
1897	4,308,720	5,733,138	109,466	57,158	688,297	762,762	16,924	22,291	11,589,290	47,630
1898	4,123,304	5,743,245	67,865	60,792	727,038	790,184	16,177	22,387	11,483,127	52,546
1899	4,065,860	6,178,879	75,620	51,164	892,468	796,235	16,930	22,983	12,024,519	47,216
1900	4,337,594	6,515,708	68,234	78,751	745,685	796,773	16,890	24,401	12,515,802	48,942
1901	4,425,738	6,656,174	68,023	67,747	721,325	765,051	17,411	25,777	12,679,223	49,394
1902	4,695,200	6,924,978	62,984	55,947	634,879	772,967	17,684	26,836	13,128,491	48,770
1903	4,558,346	7,249,869	69,342	44,494	736,683	768,308	17,632	27,191	13,402,523	53,788

Wheat.

The wheat harvest of 1903 showed an average yield of 38·37 bushels per acre, the crop realised being 7,457,915 bushels, against 4,046,589 bushels in 1902.

The quantity of wheat of the previous season's harvest held by farmers in October, 1902, as shown by the gazetted figures, was 1,230,780 bushels, an amount which excludes stocks of grain and flour held by merchants and millers. The total amount of wheat exported during the year 1902 was 194,671 bushels, while the imports were 23,395 bushels, most probably for seeding purposes.

The imports of flour during 1902 were 99,069 centals (4,953½ tons), and the exports 381 tons.

The area under wheat for threshing increased from 163,462 acres in 1902 to 194,355 acres in 1903; and this increase of 30,893 acres was shared by all the provincial districts excepting Hawke's Bay. In addition to the area cut for threshing, 389 acres were cut for chaff, and 15 acres for ensilage, while 496 acres were fed down with stock, so that the total area sown in wheat was 195,255 acres.

Of the 194,355 acres in wheat (for threshing) this year, no less than 135,907 acres were in Canterbury, and 42,688 acres in Otago.

The area under wheat for grain, the estimated gross produce in bushels, and the average yield per acre for each of the last thirteen years were :—

Year.	Land under Wheat.	Estimated Gross Produce.	Average Yield per Acre.
	Acres.	Bushels.	Bushels.
1891	301,460	5,723,610	18·99
1892	402,273	10,257,738	25·50
1893	381,245	8,378,217	21·98
1894	242,737	4,891,695	20·15
1895	148,575	3,613,037	24·32
1896	245,441	6,843,768	27·88
1897	258,608	5,926,523	22·92
1898	315,801	5,670,017	17·95
1899	399,034	13,073,416	32·76
1900	269,749	8,581,898	31·81
1901	206,465	6,527,154	31·61
1902	163,462	4,046,589	24·76
1903	194,355	7,457,915	38·37

The following gives the area in wheat, and the estimated produce, for the Australian States for the season of 1902 :—

State.	Wheat-crop.		
	Acres.	Bushels.	Bushels per Acre.
Queensland	87,232	1,692,222	19·40
New South Wales	1,392,070	14,808,703	10·64
Victoria	1,754,417	12,127,382	6·91
South Australia	1,743,452	8,012,762	4·60
Western Australia..	93,707	933,101	9·96
Tasmania	44,084	963,662	21·86

The Wheat-crop of the World.

The estimated wheat-crop of the world for last year, compared with the actual returns for the previous four years, has been arrived at from figures published in the *Statist* of 30th August, 1902 (in bushels of 60 lb., 000's omitted).

	1902.	1901.	1900.	1899.	1898.
Austria	46,000	44,000	40,800	49,600	46,400
Hungary*	176,000	138,000	152,000	150,000	140,000
Belgium	14,000	12,000	12,000	12,000	14,000
Bulgaria	40,000	32,000	24,000	28,000	40,000
Denmark	3,200	2,000	2,600	4,000	4,000
France	336,000	304,000	325,200	366,000	364,000
Germany	140,000	96,000	156,000	157,600	150,400
Greece	6,000	5,200	6,000	6,000	6,000
Holland	6,000	5,200	4,000	5,200	4,800
Italy	116,000	128,000	116,000	134,000	132,000
Portugal	6,000	4,800	4,000	4,000	6,000
Roumania	72,000	70,000	54,000	26,000	56,000
Russia†	376,000	344,000	328,000	344,000	352,000
Caucasus	56,000	56,000	56,000	52,000	48,000
Servia	12,000	10,000	8,000	13,200	12,000
Spain	108,000	112,000	98,000	95,200	120,000
Sweden	4,000	4,000	4,000	4,000	4,400
Switzerland	4,000	4,000	4,000	4,000	4,000
Turkey (Europe) ..	40,000	32,000	32,000	24,000	28,000
United Kingdom ..	52,000	56,000	54,400	66,000	80,000
Totals for Europe ..	1,613,200	1,459,200	1,481,000	1,544,800	1,612,000
Algeria .. .	28,000	26,000	24,000	20,000	28,000
Tunis	8,000	8,000	10,000	8,000	6,000
Argentine Republic ..	80,000	56,000	68,000	104,000	96,000
Australasia	32,000	43,200	55,200	44,000	54,000
Asia Minor	40,000	40,000	40,000	40,000	48,000
Canada	96,000	88,000	52,000	64,000	64,000
Cape Colony	4,000	2,000	4,000	4,000	4,400
Chili	12,000	8,800	8,000	12,000	16,000
Egypt	12,000	10,000	8,800	10,000	10,000
India	224,000	252,000	184,000	236,000	248,000
Persia	20,000	20,000	24,000	20,000	20,000
Syria	20,000	16,000	16,000	12,000	12,000
United States of America	656,000	752,000	600,000	656,000	720,000
Uruguay	8,000	6,000	6,000	7,200	12,000
Mexico	14,000	14,000	12,000	12,000	12,000
Totals out of Europe	1,254,000	1,342,000	1,112,000	1,249,200	1,350,400
Grand total ..	2,867,200	2,801,200	2,593,000	2,794,000	2,962,400

* Including Slavonia and Croatia. † Including Poland and Siberia.

Consumption of Wheat.

The yearly consumption of wheat per head of population in New Zealand has been estimated at 6 bushels, and the quantity required for seed at 2 bushels to the acre.

Using these figures, the Department of Agriculture estimates that there will be a large surplus quantity after providing for this year's wants.

WHEAT: ESTIMATED SURPLUS, 1903.

	Bushels.	Bushels.
The area for threshing was 194,355 acres, and the total yield computed at		7,457,915
Amount of wheat on hand, 31st October, 1902 (as per returns) ..		1,230,780
Amount of wheat and flour imported from 1st November, 1902, to 28th February, 1903		59,520
		8,748,215
Wheat and flour exported from 1st November, 1902, to 28th February, 1903	76,940	
Consumption for same period for population of 850,000, at the rate of 6 bushels per head per annum ..	1,700,000	
		1,776,940
Leaving available for all purposes as at 28th February, 1903 ..		6,971,275
Estimated quantity required for seed (say, 200,000 acres at 2 bushels per acre)	400,000	
Estimated consumption of 860,000 persons, at 6 bushels per head, from 1st March, 1903, to 28th February, 1904	5,160,000	
		5,560,000
Apparent surplus		1,411,275

The difficulty of correctly computing the consumption of breadstuffs is shown by the great differences in the estimates arrived at.

The average quantity required per head of the population (exclusive of that used for seed) has been calculated at 5·9 bushels for New South Wales, and 5·2 bushels for Victoria, by statisticians in those States.

The average consumption of wheaten breadstuffs in New Zealand thus appears to be somewhat higher than in New South Wales and Victoria.

The following is the average annual consumption of wheat per inhabitant in some of the principal countries of the world :—

United Kingdom	5·6	bushels.
Canada	6·6	"
France	8·1	"
Germany	3·0	"
Russia	2·1	"
Italy	5·4	"
United States	4·5	"

The English consumption during the last twenty-five years appears to have ranged from 5½ to 6 bushels per head of population.

Oats.

The extent of land in oats grown for grain in 1903 was 483,659 acres, against 405,924 acres in the preceding year, an increase of 77,735 acres. The Provincial Districts of Otago (230,082 acres) and Canterbury (199,346 acres) account for 429,428 acres of the total area, Wellington taking third place with 27,884 acres. The breadth of land in oats for chaffing, ensilage, or feeding down with stock was 205,357 acres, an increase of 5,849 acres on the figures for 1902.

The average yield per acre was, in 1903, 45 bushels, and in 1902, 37·06 bushels, the quantity of produce increasing from 15,045,233 bushels to 21,766,708 bushels.

The oat-crop for 1902 in the Australian States was as follows:—

	Acres.	Bushels.	Average per Acre.
Queensland	1,535	42,208	27·49
New South Wales ..	32,245	687,179	21·31
Victoria	329,150	6,724,900	20·43
South Australia ..	34,660	469,254	13·54
Western Australia ..	9,641	158,638	16·77
Tasmania	54,089	1,702,659	31·48

Maize.

This is a very important crop. In 1903 there were 12,038 acres sown for grain, the yield being 607,609 bushels of corn, an average of 50·48 bushels per acre. Maize is grown only in the North Island, with the exception of a few acres in Nelson and Otago. The Provincial District of Auckland had 10,983 acres; Hawke's Bay, 723 acres; Taranaki, 101 acres; and Wellington, 212 acres, in 1903. As considerable interest is taken in this crop, the group of counties where it is chiefly grown is stated, viz.: Hobson, Manukau, Thames, Ohinemuri, Rodney, Whangarei, Mongonui, Waikato, Waipa, West Taupo and Kawhia, Hokianga, Tauranga, Whakatane, Opotiki, Waiapu, Cook, Wairoa, and Hawke's Bay. Small acreages are found in all the counties of the Auckland, and in most of the counties in the Taranaki, Hawke's Bay, and Wellington Districts.

Barley.

Under barley, 27,921 acres were returned in 1903, the crop being 1,136,232 bushels, an average yield per acre of 40·69 bushels. In 1902 the area under barley was 26,514 acres, and the yield 855,993 bushels, or 32·28 bushels per acre.

Rye.

There were 1,279 acres in rye, yielding 38,370 bushels, or at the rate of 30 bushels per acre, in 1903, against 1,090 acres and 27,250 bushels, the rate being 25 bushels per acre, in 1902.

Peas and Beans.

The area under peas for threshing in the season 1903 was 8,600 acres, yielding 300,675 bushels, or an average of 34·96 bushels per acre, against 7,242 acres and 164,712 bushels, or 22·88 bushels per acre, in the previous year.

Under beans there were 3,037 acres, giving a return of 90,346 bushels, the average being 29·71 bushels per acre, against 3,504 acres and 88,905 bushels (25·65 bushels per acre) in 1902.

Potatoes.

The area under potatoes was 31,408 acres in 1903, yielding the return of 193,267 tons, or a rate of 6·15 tons per acre, against 31,259 acres in 1902, and 206,815 tons (or 6·61 tons per acre), an increase of 149 acres but a decrease in the yield of 13,548 tons.

A comparison of the gross yield of potatoes with the amount exported in each of the twelve years 1883–94 showed that for such period an average of 597 lb. per head of population was retained in the colony. Allowing for waste, pig-feed, and seed, the average amount retained for human consumption was found to be 449 lb. a head.

Turnips.

Turnips and rape form a most important crop in a sheep-breeding country such as New Zealand, and in 1892 the area of land under this crop amounted to 422,359 acres. The returns for 1895 gave only 385,788 acres, but for the present year 512,686 acres (392,830 acres in turnips and 119,856 in rape) were set down as under these crops; and there were 10,350 acres in addition, in mangolds (8,141 acres), beet (376 acres), and carrots (1,833 acres).

The cost of growing turnips sown broadcast and in drills may be: Broadcast—Ploughing, 5s. 6d. per acre; harrowing, 3s. per acre; rolling, 1s. per acre; seed and sowing, 1s. 6d. per acre: total, 11s. per acre. Drill—Ploughing, 5s. 6d.; grubbing, 3s.; harrowing, 3s.; rolling, 1s.; drilling, 3s. 6d.; hand-hoeing, 10s.; horse-hoeing, 5s.; seed and sowing, 2s. 6d.; manure, 10s. to 15s.: total, £2 3s. 6d. to £2 8s. 6d. per acre.

Hops.

There were 790 acres under hops in 1903, as against 844 acres last year. No account of the produce for the last eight years was taken, but in 1895 the yield was 7,556 cwt. In 1900 the total quantity used by the breweries in the colony amounted to 5,020 cwt. Of the land under hops in 1903, 702 acres were in the Waimea County and 73 in Collingwood, both in the Provincial District of Nelson. The import of hops in 1902 amounted to 693 cwt., and the exports, the produce of the colony, to 4,311 cwt.

Tobacco.

The growing of tobacco does not progress in New Zealand. In 1889, 34 acres were being cultivated; in 1890, 25 acres; in 1891, 16 acres; in 1892, 6 acres; in 1893, 4 acres; in 1894, 4 acres; and in 1895, 5 acres, producing 1,599 lb. of dried leaf. Statistics of this crop have not been taken since 1895.

Gardens and Orchards.

The extent of land in garden was 17,632 acres, of which 14,062 acres were private gardens and 3,570 acres market gardens. In plantations of forest trees there were 53,788 acres.

There were 26,486 acres in orchard in 1903, an increase of 192 acres on the area so returned in the previous year, and 705 acres were returned as "vineyard." The fruit-crop of the colony is supplemented by a considerable import from the Australian States and Fiji.

Sown Grasses and Seeds.

New Zealand is essentially suited for grazing purposes. Wherever there is light and moisture English grasses thrive when the natural bush and fern are cleared off—in fact, the white clover gradually overcomes the fern; and, from the mildness of the winter season, there are few places where there is not some growth, even in the coldest months of the year. In all parts of the colony stock live, although in varying condition, without other food than such as they can pick up. Sown-grass land, as might be expected, heads the list of cultivations.

At the beginning of the year 1903 there were 11,808,215 acres under artificial grasses. Of these, 4,558,346 acres had been previously ploughed, presumably under grain or other crops, while 7,249,869 acres had not been ploughed. Much of the latter area was bush or forest land, sown down in grass after the timber had been wholly or partially burnt off.

The area under ryegrass for seed in the season of 1903 was 27,881 acres, yielding 576,931 bushels of 20 lb., or a rate of 20·69 bushels per acre, against 16,244 acres and 356,765 bushels, an average of 21·97 bushels per acre, in 1902.

In cocksfoot there were 27,884 acres, which yielded 6,786,844 lb., or an average of 243 lb. per acre, against 27,876 acres and 4,481,340 lb. (a rate of 161 lb. per acre) in the previous year.

Seeds for sowing pasture lands are used much as in Great Britain, the following being a common mixture: Perennial ryegrass, 25 lb. to 30 lb. per acre; cocksfoot, 2 lb.; alsike, 2 lb.; timothy, 3 lb.; cowgrass, 2 lb.; red clover, 2 lb.; white clover, 2 lb.; rape, 1 lb.: total, 39 lb. to 44 lb. per acre. Pastures are renewed at intervals of from four to eight years, according to the nature of the land.

The following shows the acreage in sown grasses in Australasia in 1901–1902:—

	Acres.
Queensland	34,679
New South Wales	467,839
Victoria (1900)	207,896
South Australia	23,510
Western Australia	11,132
Tasmania	314,422
New Zealand	11,620,178

It will be observed that the acreage of land under sown grasses was eleven times as great in New Zealand as in the whole of Australia and Tasmania. When compared in size with the States of Australia, New Zealand is not large — about one-thirtieth of their total area—but in respect of grazing capabilities the relative importance of this country is much greater. Australia is generally unsuitable, owing to conditions of climate, for the growth of English grasses, and the amount of feed produced by the natural grasses throughout the year is very much less per acre than is obtained from the sown-grass lands in New Zealand; indeed, it may be said that the average productiveness of grass-land is about nine times as great here as in Australia, or, in other words, that land in this colony covered with English grasses may be considered equal for grazing purposes to an area of Australian land about nine times as great.

In addition to the artificially-sown pastures, the returns for 1903 show that 22,431,136 acres of unimproved land, including that in tussock or native grass, belonged to the occupied holdings, and were available for stock-feeding by the sheep-farmers and cattle-farmers of the colony.

SECTION XX. — OCCUPATION OF LAND; AND LIVE-STOCK.

THE occupation of land must not be confused with ownership,* because there are large parcels of lands held which are unused and unoccupied. Neither can lands occupied be properly compared with the returns of Crown lands alienated or in process of alienation, for certain lands have passed into the hands of Europeans which were never made waste lands of the Crown.

The occupied lands of the colony for 1902–1903 have been returned by the Department of Agriculture at 35,887,447 acres, including Crown lands leased for pastoral purposes only, or 379,558 acres in excess of the area for the preceding year.

Tables are given showing the numbers and acreages of holdings, grouped according to size, for the last five years in which the Department of Agriculture has compiled the information.

In 1895 the holdings of over 1 acre in extent, as returned to the Registrar-General, numbered only 46,676. Holdings occupied by Maoris were excluded, besides holdings of exactly 1 acre, also gardens and orchards attached to residences.†

OCCUPIED LANDS: HOLDINGS.

[This and the succeeding statement deal with the full extent of occupied land, *including* Crown pastoral leases.]

Sizes of Holdings.	No. of Holdings.				
	1898-99.	1899-1900.	1900-1901.	1901-1902.	1902-1903.
1 acre to 10 acres, inclusive	17,230	17,454	17,468	17,817	18,348
10 acres to 50 "	11,426	11,505	11,399	11,531	11,348
50 " 100 "	7,276	7,195	7,162	7,130	7,239
100 " 200 "	9,164	9,177	9,080	9,332	9,400
200 " 320 "	5,584	5,675	5,751	5,898	5,998
320 " 640 "	5,555	5,830	6,023	6,201	6,387
640 " 1,000 "	1,946	2,128	2,212	2,324	2,449
1,000 " 5,000 "	2,589	2,667	2,802	2,854	3,003
5,000 " 10,000 "	369	352	392	393	366
10,000 " 20,000 "	220	233	233	234	217
20,000 " 50,000 "	175	169	167	165	175
50,000 acres and over	105	100	97	103	104
	61,639	62,485	62,786	63,982	65,034

* The latest information in reference to ownership of land which is available gives figures up to the 31st March, 1902. It is contained in Parliamentary Return B.-20 of that year, and states the total number of owners of land (town and country holdings of all sizes) to be 115,713 for the colony. The most important figures (showing ownership of *productive* land) are those of freeholders outside boroughs and town districts, and excluding holdings of under 5 acres. These figures are:—

NEW ZEALAND OWNERS (OVER 5 ACRES).

Year 1902	43,735	Year 1886	34,450
" 1892	38,935	" 1883	30,764
" 1889	37,432		

† At the census of April, 1901, the actual number of persons described in the census schedules as having occupations necessitating their occupying holdings of land was 40,144. This number includes 26,337 farmers, 3,220 runholders, 895 market-gardeners, 2,388 horticulturists or gardeners, 4,702 dairy-farmers, 345 fruit-growers, 29 vignerons, 159 poultry-farmers, 35 bee-farmers, and 34 others.

The holdings are shown to have increased by the number of 3,395 since 1898–99.

The total acreage of occupied land for each of the last five years is shown:—

OCCUPIED LANDS: ACREAGES.

Sizes of Holdings in Acres.				1898–99. Acres.	1899–1900. Acres.	1900–1901. Acres.	1901–1902. Acres.	1902–1903. Acres.
1 to	10	inclusive	...	68,671	70,290	71,387	73,954	73,726
10 "	50	"	...	315,651	322,936	320,158	324,620	314,940
50 "	100	"	...	570,503	568,716	556,868	560,888	566,406
100 "	200	"	...	1,401,171	1,404,581	1,389,120	1,431,532	1,424,265
200 "	320	"	...	1,469,859	1,475,195	1,493,761	1,543,749	1,550,548
320 "	640	"	...	2,568,462	2,688,231	2,772,325	2,836,787	2,908,745
640 "	1,000	"	...	1,649,580	1,731,636	1,843,235	1,924,982	1,960,730
1,000 "	5,000	"	...	5,364,539	5,495,467	5,715,047	5,849,516	6,195,878
5,000 "	10,000	"	...	2,579,773	2,451,073	2,591,497	2,525,849	2,600,348
10,000 "	20,000	"	...	3,274,623	3,201,355	3,272,741	3,285,879	3,146,714
20,000 "	50,000	"	...	5,448,033	5,535,541	5,417,990	5,578,887	5,272,922
50,000 and over		"	...	9,675,403	9,477,632	9,467,444	9,571,246	9,872,225
				34,386,268	34,422,653	34,911,578	35,507,889	35,887,447

In regard to holdings, out of a total of 65,034 in 1903 the large proportion of 36,935, or 56·79 per cent., were from 1 to 100 acres in extent; 46,335, or 71·25 per cent., were from 1 to 200 acres; and 52,333, or 80·47 per cent., were from 1 to 320 acres in size. The total number over 320 acres was only 12,701, or 19·53 per cent. of the whole, thus indicating a considerable degree of moderately close settlement, although the area of the holdings over the 320-acres limit necessarily shows as very large in a table which includes the Crown pastoral leases.

The plan of excluding these leases from the table showing the holdings in classes has its advantages, though not now adopted.

From the total extent of occupied land shown for the colony, such of the area of the Crown pastoral leases *as has been distinguished by the enumerators* can be deducted, and comparison then made for the census years 1886 and 1891, and the Agricultural Department returns for 1902–1903. The figures are:—

—	Census Results, March, 1886.	Census Results, April, 1891.	Figures returned by Department of Agriculture, 1902–1903.
	Acres.	Acres.	Acres.
Total area of occupied land (after deducting Crown pastoral leases)	17,077,074	19,951,925	27,099,082

The acreage shown in the returns as held on Crown pastoral lease would appear to have been understated in the returns rendered by occupiers, for the table (which is given hereunder) shows less than nine millions of acres. The figures in the previous

column headed "Held from Crown under Various Tenures" seem greater than they should be, judging from the Lands Department returns. Possibly there may have been some misplacements, and caution is advised in using the numbers in the last two columns.

OCCUPATION OF LAND: TENURE.

Provincial Districts.	Total Area of Holdings.	Freehold.	Leased from Private Individuals or Public Bodies.	Leased from Natives.	Held from Crown under Different Tenures.	Held under Pastoral Lease.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland ..	5,801,666	3,965,533	416,176	501,039	878,070	40,848
Taranaki ..	1,054,706	568,883	200,276	98,282	187,265	..
Hawke's Bay ..	3,273,065	1,793,283	316,178	829,423	293,274	40,907
Wellington ..	3,852,954	2,490,557	490,690	253,333	502,161	116,213
Marlborough ..	2,303,575	800,682	99,904	23,957	791,754	587,278
Nelson ..	2,046,346	1,004,704	122,877	21,136	261,761	635,868
Westland ..	554,779	60,467	6,210	2,741	317,191	168,170
Canterbury ..	6,488,625	2,716,711	838,036	14,542	521,823	2,397,513
Otago ..	10,511,731	2,890,473	1,041,599	10,472	1,767,619	4,801,568
Totals ..	35,887,447	16,291,293	3,531,946	1,754,925	5,520,918 *	8,788,365 *

* For remarks as to the accuracy of the figures in the columns see above.

It would appear that holders of their lands from the Crown do not return to collectors so much as the quantity on which they pay rent to Government. The acreages stated to be held under Crown pastoral lease do not agree with the tables of the Lands Department.

Arranged according to the number of holdings, the provincial districts stand in order as under:—

Auckland	16,324	holdings.
Otago	13,757	"
Canterbury	11,273	"
Wellington	10,685	"
Taranaki	4,499	
Hawke's Bay	3,191	"
Nelson	3,148	"
Marlborough	1,433	"
Westland	724	"

The occupied holdings of the North Island now considerably outnumber those of the Middle Island, the numbers being—North Island, 34,699; Middle Island, 30,335. For the year 1896-97 the returns showed 29,535 holdings for the Middle Island, against 29,369 for the North, besides 36 holdings at the Chatham Islands of which no account was taken for the last five years.

The full details of holdings and acreages, classified according to size, for the year 1902-1903 will be found in the table on the following page:—

Occupation of Land: Number and Area of Holdings (including Crown Pastoral Leases).

As compiled by the Department of Agriculture.

Table showing for the Year 1902-1903 the Occupied Holdings and the Acreages (including Crown Pastoral Leases) in Groups of Sizes, according to the Provincial Districts.

Provincial Districts.	Total of Holdings.	1-10 Acres, inclusive.	Over 10-50 Acres, inclusive.	Over 50-100 Acres, inclusive.	Over 100-200 Acres, inclusive.	Over 200-320 Acres, inclusive.	Over 320-640 Acres, inclusive.	Over 640-1,000 Acres, inclusive.	Over 1,000-5,000 Acres, inclusive.	Over 5,000-10,000 Acres, inclusive.	Over 10,000-20,000 Acres, inclusive.	Over 20,000-50,000 Acres, inclusive.	Over 50,000 Acres.
Auckland: Area in acres ...	5,801,666	17,804	82,761	156,561	350,657	395,482	677,668	476,158	1,281,659	591,661	419,482	570,876	780,897
Number of holdings ...	*16,324*	*4,648*	*2,867*	*2,022*	*2,365*	*1,533*	*1,496*	*602*	*639*	*92*	*33*	*17*	*10*
Taranaki: Area in acres ...	1,054,706	3,151	16,921	59,118	170,393	162,783	215,604	109,394	288,368	6,070	22,904	...	...
Number of holdings ...	*4,499*	*622*	*566*	*750*	*1,140*	*635*	*482*	*140*	*161*	*1*	*2*	...	...
Hawke's Bay: Area in acres ...	3,273,065	4,677	16,823	19,939	38,746	47,256	125,117	89,962	503,614	342,338	554,370	898,858	631,365
Number of holdings ...	*3,191*	*1,093*	*645*	*261*	*267*	*177*	*272*	*122*	*230*	*52*	*33*	*32*	*7*
Wellington: Area in acres ...	3,852,954	12,765	47,372	95,885	277,241	238,389	519,667	372,846	998,290	435,129	450,604	215,347	189,419
Number of holdings ...	*10,685*	*2,921*	*1,712*	*1,169*	*1,758*	*921*	*1,135*	*459*	*611*	*60*	*30*	*7*	*2*
Marlborough: Area in acres ...	2,303,575	1,557	4,044	8,621	22,371	26,370	85,936	71,941	269,257	93,859	243,417	383,864	1,092,338
Number of holdings ...	*1,433*	*449*	*170*	*115*	*149*	*101*	*182*	*90*	*126*	*14*	*16*	*12*	*9*
Nelson: Area in acres	2,046,346	3,037	18,721	31,520	68,258	69,471	131,787	99,999	270,123	22,911	93,149	403,146	834,224
Number of holdings ...	*3,148*	*757*	*648*	*401*	*459*	*269*	*292*	*124*	*138*	*4*	*6*	*13*	*7*
Westland: Area in acres ...	554,779	680	3,990	6,438	17,531	16,253	25,714	9,589	43,780	73,769	171,684	185,351	...
Number of holdings ...	*724*	*217*	*127*	*86*	*114*	*62*	*55*	*12*	*22*	*11*	*11*	*7*	...
Canterbury: Area in acres ...	6,488,625	14,601	62,853	89,028	190,320	224,684	419,240	276,473	1,123,508	396,266	487,079	983,844	2,220,529
Number of holdings ...	*11,273*	*3,724*	*2,269*	*1,154*	*1,284*	*871*	*922*	*336*	*562*	*54*	*35*	*36*	*26*
Otago: Area in acres	10,511,731	15,254	61,455	99,296	288,748	369,860	708,012	454,368	1,417,279	638,345	704,025	1,631,636	4,123,453
Number of holdings ...	*13,757*	*3,857*	*2,344*	*1,281*	*1,864*	*1,429*	*1,551*	*564*	*614*	*78*	*51*	*51*	*43*
Totals Area in acres ...	35,887,447	73,726	314,940	566,406	1,424,265	1,550,548	2,908,745	1,960,730	6,195,878	2,600,348	3,146,714	5,272,922	9,872,225
Totals *Number of holdings*	65,034	18,348	11,348	7,239	9,400	5,998	6,387	2,449	3,003	366	217	175	104

LIVE-STOCK.

A comparative table is presented showing the increase in live-stock since the year 1858. The figures are taken from the census as far as 1891, but for 1895–96 and following years the results of the enumeration made annually by the Department of Agriculture under "The Agricultural and Pastoral Statistics Act, 1895," have been made use of.

Year.	Horses.	Asses and Mules.	Cattle.	Sheep.	Goats.	Pigs.	Poultry.
1858 ..	14,912	122	137,204	1,523,324	11,797	40,734	*
1861 ..	28,275	153	193,285	2,761,383	12,191	43,270	236,098
1864 ..	49,409	339	249,760	4,937,273	12,005	61,276	378,414
1867 ..	65,715	323	312,835	8,418,579	11,964	115,104	676,065
1871 ..	81,028	397	436,592	9,700,629	12,434	151,460	872,174
1874 ..	99,859	267	494,917	11,704,853	14,276	123,921	1,058,198
1878 ..	137,768	241	578,430	13,069,338	14,243	207,337	1,323,542
1881 ..	161,736	362	698,637	12,985,085	11,223	200,083	1,566,114
1886 ..	187,382	297	853,358	16,564,595	10,220	277,901	1,679,021
1891 ..	211,040	348	831,831	18,128,186	9,055	308,812	1,790,070
1895–96	237,418	426	1,047,901	19,826,604†	*	239,778	*
1896–97	249,813	434	1,138,067	19,138,493†	*	209,834	*
1897–98	252,834	393	1,209,165	19,687,954†	*	186,027	*
1898–99	258,115	534	1,203,024	19,673,725†	*	193,512	*
1899–1900	261,931	459	1,222,139	19,348,506†	*	249,751	*
1900–1901	266,245	480	1,256,680	19,355,195†	*	250,975	*
1901–1902	279,672	406	1,361,784	20,233,099†	*	224,024	*
1902–1903	286,955	464	1,460,663	20,342,727†	*	193,740	*

* Not enumerated. † Numbers for April, 1895, 1896, 1897, 1898, 1899, 1900, 1901, and 1902.

The stock owned by Maoris in the year 1901, which is included above, comprised 317,436 sheep and 36,943 head of cattle. The number of horses is not specified, but is known to be large.

TABLE SHOWING FOR EACH COUNTY IN NEW ZEALAND THE NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS IN 1902.

County.	Horses, October, 1902.	Cattle, including Calves, October, 1902.	Dairy Cows, included in foregoing.	Sheep, including Lambs, April, 1902.	Pigs, October, 1902.
Mongonui ..	2,122	8,859	1,469	25,289	2,175
Whangaroa ..	564	1,686	158	8,344	804
Bay of Islands ..	2,549	11,277	2,120	32,708	2,115
Hokianga ..	2,692	7,084	1,893	11,945	2,756
Rodney	2,292	14,189	3,568	78,696	562
Whangarei ..	4,524	29,616	7,780	87,805	1,709
Otamatea ..	1,610	12,711	2,550	48,581	691
Hobson	2,140	20,183	3,191	21,084	3,972
Waitemata ..	2,494	12,316	3,836	40,659	1,262
Eden	6,383	7,105	3,694	4,250	1,690
Mangkau ..	8,345	50,558	18,657	95,153	5,297

TABLE SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, ETC.—*continued.*

County.	Horses, October, 1902.	Cattle, including Calves, October, 1902.	Dairy Cows, included in foregoing.	Sheep, including Lambs, April, 1902.	Pigs, October, 1902.
Coromandel ..	898	4,136	800	13,644	689
Thames ..	1,793	5,237	1,849	4,749	1,163
Ohinemuri ..	1,722	5,856	1,983	4,138	1,949
Waikato ..	3,315	22,490	6,642	66,159	2,572
Raglan	3,328	26,510	4,180	92,643	2,177
Waipa	3,654	24,315	7,722	34,011	2,806
Piako	2,926	31,172	4,588	176,591	1,345
West Taupo and Kawhia	5,533	21,247	1,960	33,972	7,922
East Taupo and Rotorua	1,872	3,137	532	30,491	1,651
Tauranga ..	2,572	15,108	2,794	4,015	1,357
Whakatane ..	826	4,474	1,134	22,992	566
Opotiki	1,525	7,151	1,694	16,762	758
Waiapu ..	4,407	16,932	559	372,242	3,757
Cook	7,193	48,056	4,538	941,421	2,888
Wairoa	3,037	10,824	1,380	558,988	913
Hawke's Bay ..	7,769	35,254	4,274	1,272,956	3,806
Waipawa ..	4,507	32,543	5,822	} 728,783	{ 1,791
Woodville ..	1,105	11,358	4,486		{ 1,191
Patangata and Weber	2,743	32,271	1,256	731,932	565
Clifton	1,415	18,762	4,894	27,149	1,223
Taranaki and Egmont	5,923	71,176	32,550	28,763	6,471
Stratford ..	2,758	44,280	18,011	115,276	2,940
Hawera ..	5,795	78,086	34,074	156,417	7,331
Patea	3,010	27,606	8,218	225,228	1,650
Waitotara ..	2,028	13,818	3,828	149,659	1,217
Wanganui and Waimarino	5,044	19,507	4,924	418,772	3,490
Rangitikei ..	5,540	34,801	8,194	506,948	2,658
Kiwitea	2,218	18,576	6,172	284,806	2,014
Pohangina ..	999	9,562	3,585	128,940	1,194
Oroua	2,333	15,579	7,576	} 301,109	{ 2,677
Kairanga ..	3,275	17,809	7,908		{ 3,067
Manawatu ..	2,628	22,013	7,215	170,166	2,817
Horowhenua ..	2,908	24,843	7,733	135,200	3,183
Hutt	5,203	15,586	7,990	217,007	2,525
Featherston ..	3,069	24,848	3,362	} 623,550	{ 2,079
South Wairarapa ..	2,277	21,067	5,050		{ 1,996
Masterton ..	3,369	23,579	3,635	543,897	1,161
Castlepoint ..	516	7,150	426	152,976	58
Akitio	1,204	12,424	1,539	162,484	439
Pahiatua ..	2,065	21,759	9,114	228,680	2,751
Eketahuna ..	947	8,251	4,320	71,644	1,242
Mauriceville ..	398	4,697	2,064	66,672	451
Marlborough ..	3,477	4,962	2,205	522,783	1,513
Sounds	855	5,129	1,838	164,657	1,213
Kaikoura ..	1,198	2,686	876	161,728	425
Collingwood ..	1,271	7,515	553	44,878	2,050
Waimea ..	4,791	12,892	5,315	209,321	3,615
Buller	508	3,680	1,468	2,084	474

TABLE SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, ETC.—*continued.*

County.	Horses, October, 1902.	Cattle, including Calves, October, 1902.	Dairy Cows, included in foregoing.	Sheep including Lambs, April, 1902.	Pigs, October, 1902.
Inangahua ..	942	6,968	1,402	23,670	754
Westland ..	1,472	10,299	2,327	17,204	767
Grey	850	5,613	1,325	11,033	645
Amuri	1,343	4,805	340	395,257	156
Cheviot	919	1,339	556	196,882	570
Ashley	8,324	17,064	6,911	801,164	6,204
Selwyn	15,455	29,642	15,419	706,610	17,608
Akaroa and Mount Herbert	2,682	23,842	5,749	246,645	2,261
Ashburton ..	9,478	9,819	3,644	876,274	7,452
Geraldine ..	4,178	5,941	2,176	689,571	2,775
Levels	3,343	5,229	2,145		1,536
Waimate ..	5.305	8,757	2,687	602,424	2,712
Mackenzie ..	1,504	2,836	1,003	418,854	557
Waitaki.. ..	6,290	20,396	8,713	563,724	3,043
Waihemo ..	1,381	4,460	1,770	120,200	486
Waikouaiti ..	1,514	9,927	5,443	79,217	1,531
Peninsula ..	873	7,560	4,346	2,470	816
Taieri	7,011	25,529	9,158	208,074	3,853
Bruce	3,684	10,880	3,470	172,640	1,402
Clutha	4,862	17,576	5,834	325,679	1,453
Tuapeka ..	3,826	6,485	2,182	374,304	890
Maniototo ..	2,174	5,894	1,319	323,043	323
Vincent.. ..	2,368	5,009	1,290	295,699	861
Lake	1,467	3,768	894	148,278	446
Southland ..	17,106	63,735	19,737	895,636	6,645
Wallace and Fiord	5,130	20,655	5,099	454,690	1,155
Stewart Island ..	12	337	88	1,688	16
Totals ..	286,955	1,460,663	428,773*	20,342,727	193,740

* Not including 43,390 heifers over two years old intended for dairying.

Live-stock in Australasia.

The following gives the number of the principal kinds of live-stock in Australasia for the year 1901–1902 :—

State or Colony.	Sheep.	Cattle.	Horses.	Pigs.
Queensland	10,030,971	3,772,707	462,119	121,641
New South Wales	41,857,099	2,047,454	486,716	265,730
Victoria	10,841,790	1,602,384	392,237	350,370
South Australia	5,060,540	479,863	178,199	89,875
Western Australia	2,542,844	394,580	73,830	61,025
Tasmania..	1,792,481	168,661	32,399	58,716
	April, 1901.	Nov., 1901.	Nov., 1901.	Nov., 1901.
New Zealand	20,233,099	1,361,784	279,672	224,024

New Zealand thus takes second place in order for number of sheep, and fourth for the number of her cattle and horses.

The losses in Australia have raised this colony to the second position in regard to sheep. To illustrate this, the case of Queensland shows 19,856,959 sheep in 1895, falling to 10,030,971 in 1901, and further to 7,213,985 in 1902; cattle fell in number from 7,012,997 in 1894 to 3,772,707 in 1901, and again to 2,543,471 in 1902.

Sheep.

The returns made to the Department of Agriculture show a smaller number of sheep for the years 1886 and 1891 than the census figures given previously, because the account was taken later in the year. The particulars are given for seventeen years, distinguishing the number for the North from that in the Middle Island.

According to these returns, the flocks of the North Island increased from 5,285,907 sheep in the year 1886 to 10,286,346 in 1902, or at the rate of over 94 per cent., while sheep in the Middle Island increased from 9,888,356 to 10,056,381, a gain of 1·70 per cent. in the same period. For the North Island the increase during the seventeen years was 5,000,439 sheep, while in the Middle Island there was an increase of 168,025.

Year.	North Island.	Middle Island.	Total.
1886	5,285,907	9,888,356	15,174,263
1887	5,506,485	9,649,141	15,155,626
1888	5,668,996	9,373,202	15,042,198
1889	5,990,244	9,433,084	15,423,328
1890	6,588,346	9,527,767	16,116,113
1891	7,159,927	9,593,825	16,753,752
1892	8,204,029	10,366,723	18,570,752
1893	8,685,361	10,695,008	19,380,369
1894	9,169,352	11,061,477	20,230,829
1895	8,994,646	10,831,958	19,826,604
1896	9,131,736	10,006,757	19,138,493
1897	9,540,717	10,147,237	19,687,954
1898	9,864,945	9,808,780	19,673,725
1899	9,953,399	9,395,107	19,348,506
1900	9,998,173	9,357,022	19,355,195
1901	10,218,945	10,014,154	20,233,099
1902	10,286,346	10,056,381	20,342,727

There was an increase of 109,628 in the total number of sheep since April, 1901, by the above figures, and an increase between 1892 and 1902 amounting to 1,771,975, or at a rate of 9·54 per cent. The export and local consumption of wool developed from 111,537,546 lb. for the year ended September, 1891, to 159,855,875 lb. for the corresponding year of 1902. The export of sheepskins and pelts, which in 1890 was 2,292,521 in number, rose to 6,144,680 in 1902.

Over a series of years the number of sheep has been well maintained, although the slaughter needed for the export of frozen mutton increased to nearly four millions of sheep and lambs in 1902.

The proportion of small flocks of sheep until 1902 increased very considerably, and with smaller flocks the rabbit difficulty is easier to master than with large ones.

NUMBER OF FLOCKS, 1886, 1891, 1896, 1900, 1901, AND 1902.

Size of Flocks.	1886.	1891.	1896.	1900.	1901.	1902.
Under 500	6,024	8,272	12,028	12,239	11,700	11,961
500 and under 1,000 ..	1,189	1,691	2,605	2,810	3,059	3,158
1,000 " 2,000 ..	747	969	1,460	2,621*	2,877*	2,962*
2,000 " 5,000 ..	532	666	892			
5,000 " 10,000 ..	263	287	340	352	397	385
10,000 " 20,000 ..	228	239	231	196	189	206
20,000 and upwards ..	166	169	147	139	138	131
	9,149	12,293	17,703	18,357	18,360	18,803

	1900.	1901.	1902.
* From 1,000 to 2,500	1,971	2,189	2,232
" 2,500 to 5,000	650	688	730
	2,621	2,877	2,962

The average size of the flocks is found to have been 1,659 sheep for 1886, 1,363 for 1891, 1,081 in 1896, 1,040 in 1899, 1,054 in 1900, 1,102 in 1901, and 1,082 in 1902.

Of the provincial districts, that of Canterbury had most sheep in 1902, Wellington came next, and Otago occupied the third place. The full particulars, with increases or decreases since 1901, are :—

Provincial Districts.	No. of Sheep in 1902.	No. of Sheep in 1901.	Increase.	Decrease.
Canterbury ..	4,341,542	4,318,887	22,655	..
Wellington ..	4,222,510	4,239,538	..	17,028
Otago ..	3,965,342	3,978,011	..	12,669
Hawke's Bay ..	3,292,659	3,298,421	..	5,762
Auckland ..	2,218,344	2,116,594	101,750	..
Nelson ..	872,092	868,808	3,284	..
Marlborough ..	849,168	821,812	27,356	..
Taranaki ..	552,833	564,392	..	11,559
Westland ..	28,237	26,636	1,601	..
	20,342,727	20,233,099	109,628	Net increase.

Five of the provincial districts show an increase in the number of sheep in 1902 when compared with the previous year's returns, aggregating 156,646, to which gain Canterbury contributed 22,655, Auckland 101,750, Marlborough 27,356, Nelson 3,284, and Westland 1601. The other four provincial districts show decreases (Wellington 17,028, Otago 12,669, Hawke's Bay 5,762, and Taranaki 11,559), and thus reduce the gain for the whole colony to 109,628, as shown above.

The number of breeding ewes in the colony in April, 1901, was returned at 9,906,616, and in April, 1902, at 9,610,149, thus showing a substantial decrease of 296,467 for the year—a matter for serious consideration. The annual export and consumption of sheep during the last five years has been :—

Year.	Export of Frozen Mutton and Lamb, including Pieces at 60 lb. to a Sheep.	Live Sheep exported.	Estimated Consumption in the Colony: Carcases.	Total.
1898	3,005,720	6,270	1,744,000	4,755,990
1899	3,468,431	4,362	1,780,000	5,252,793
1900	3,055,135	3,840	1,800,000	4,858,975
1901	3,400,138	3,668	1,834,000	5,237,806
1902	4,084,578	48,047	1,904,000	6,036,625

It has been estimated that the annual consumption of mutton in New Zealand is equivalent to 2·25 sheep per inhabitant, and that the number of sheep required in the present year (1903) for food will be about 1,932,000. (Maoris, for the purposes of this calculation, have been included.)

Two important advantages that sheep-farming has in New Zealand are (1) the low cost of the production of mutton, and (2) the high percentage of natural increase. With regard to the high percentage of increase, there need only be cited a few average returns from well-known flocks to show what excellent lambings New Zealand farmers obtain under good management.

LAMBING RETURNS.—AVERAGES.

Locality.	Breed of Flock.	Breed of Rams.	Breed of Ewes.	No. of Ewes.	Percentage of Lambs.	Remarks.
North Island ..	Lincoln	Lincoln	Lincoln	7,517	81·04	Land merely surface-sown in English-grass pasture.
" ..	"	"	"	5,301	85·05	
" ..	"	"	⅞ Lincoln	12,177	100·00	
" ..	Romney	Romney	Romney	1,141	96·17	
" ..	Lincoln	Southd'n	Lincoln	2,033	94·71	
Middle Island	Merino	Merino	Merino	14,765	75·36	Mountainous country in n'tive past're, unimproved.
" ..	"	B. Leic'str	"	4,235	88·94	
" ..	Cross-bred	"	Cross-bred	8,624	80·82	
" ..	Half-bred	"	Half-bred	2,747	82·79	
" ..	B. Leic'str	"	B. Leic'str	778	90·77	
" ..	Lincoln	Lincoln	Lincoln	452	88·08	In English-grass pasture.
" ..	R. Marsh	R. Marsh	R. Marsh	253	111·46	
" ..	E. Leic'str	E. Leic'str	E. Leic'str	464	93·34	
" ..	Shropshire	Shropshire	Shropshire	168	97·41	
" ..	Southd'n	Southd'n	Southd'n	114	96·87	

The above returns are fair average ones, but much higher might have been shown if exceptional cases had been selected.

Cattle.

The increase of cattle between 1891 and 1896 was 216,070, or at the rate of 25·98 per cent. The rapid development of the butter

and cheese industry, represented in great part by the export figures given in the comparative table on page 330, created a requirement for milch cows, which increased in number from 206,906 in 1891 to 276,217 in 1896, or at the rate of 33·50 per cent.

The cattle as enumerated in 1902–1903 for each provincial district are given in the next table. Here is shown the substantial increase of 98,879 head of all classes over the number returned in 1901–1902, and of no less than 51,670 in the number of cows and heifers for dairy purposes.

Provincial District.	Bulls for Stud Purposes.	Steers over Two Years Old.	Cows and Heifers for Dairy Purposes.	Cows and Heifers for Breeding Purposes.	Cows and Heifers for Fattening.	Steers and Heifers under Two Years not otherwise enumerated.	Totals.
Auckland	6,528	72,492	102,403	60,341	13,738	155,903	411,405
Taranaki	3,895	28,706	106,582	5,584	5,505	89,638	239,910
Hawke's Bay ..	1,890	22,026	19,080	35,421	3,704	40,129	122,250
Wellington ..	5,616	44,371	102,929	46,015	8,809	108,129	315,869
Marlborough ..	251	1,140	5,188	350	407	5,441	12,777
Nelson	589	4,594	12,882	1,666	2,262	15,206	37,199
Westland	249	3,242	4,531	2,368	895	4,627	15,912
Canterbury ..	1,637	9,433	42,871	2,561	4,105	42,523	103,130
Otago	3,394	24,655	75,697	16,335	7,736	74,394	202,211
Totals, 1902–1903..	24,049	210,659	472,163*	170,641	47,161	535,990	1,460,663
1901–1902..	21,228	202,810	420,493*	166,126	50,267	500,860	1,361,784
Increase, 1902–1903	2,821	7,849	51,670	4,515	..	35,130	98,879
Decrease, 1902–1903	..	..	..	..	3,106	..	..

*Including heifers over two years old intended for dairying: 39,001 in 1901–1902, and 43,390 in 1902–1903. For actual number of dairy cows in each county see table on pages 389 to 391.

Classified according to breed, the numbers for the two years under review are:—

	1902–1903.	1901–1902.
Pure-bred—		
Shorthorn	73,030	63,476
Hereford	11,315	6,598
Polled Angus	12,359	8,836
Ayrshire	4,987	4,705
Jersey	4,193	4,586
Other pure-breds	4,341	9,101
Crosses	1,350,438	1,264,482
Totals	1,460,663	1,361,784

Out of a total of 1,460,663 cattle in the colony, the North Island is shown to have had 1,089,434, or 75 per cent., while the Middle Island had 371,229, or 25 per cent. Similarly, the dairy cows and heifers intended for dairying in the North Island numbered 330,994, and in the Middle Island 141,169.

Thus, the North Island, which now leads as regards number of sheep, contains more than twice as many dairy cows and other cattle as the Middle Island.

Of the total number of cattle (1,460,663) given above, 428,773 were dairy cows. It is found impossible to give a statement of the actual amount of butter and cheese made, even at the factories only. All that can be said is that there were in September, 1902, 276 cheese and butter factories and creameries, with 319 skimming-stations, reported to the Department of Agriculture. But very few of these factories made any return to the Department of their output for the previous year, and it is therefore impossible to arrive at the total quantity of cheese and butter made. The census returns for March, 1901, show there were then 247 factories and 202 creameries, the annual output during the year 1900 amounting to 29,758,310 lb. of butter and 139,687 cwt. of cheese.

Horses.

The increase in horses is shown for four census years:—

Census Years.	Number of Horses.	Numerical Increase.	Increase per Cent.
1886	187,382		
		23,658	12·63
1891	211,040		
		26,378	12·50
1896	237,418		
		28,827	12·14
1901	266,245		

At the enumeration made in 1902–1903 (October to January), the number of horses was found to have increased to 287,419 (including 464 mules and asses), for which particulars are given. It will be seen that the Provincial District of Auckland had by far the most horses, Otago and Canterbury following, Wellington taking fourth place.

Provincial District.	Entires.	Geldings.	Mares over Two Years old.	Mares with Foal at Foot, or to foal this Season.	Colts and Fillies under Two Years old.	Totals.
Auckland ..	858	33,703	23,587	8,955	10,415	77,518
Taranaki ..	133	7,994	6,387	1,961	2,428	18,903
Hawke's Bay ..	211	8,648	6,312	1,897	2,131	19,199
Wellington ..	530	20,034	14,744	5,292	5,438	46,038
Marlborough ..	58	2,388	1,879	466	744	5,535
Nelson	109	4,148	3,305	989	1,226	9,777
Westland ..	41	1,145	710	195	242	2,333
Canterbury ..	407	21,757	17,301	4,634	6,275	50,374
Otago	437	24,697	19,180	5,392	8,036	57,742
Totals, 1902–1903	2,784	124,514	93,405	29,781	36,935	287,419*
„ 1901–1902	2,596	124,869	93,188	27,249	32,176	280,078*
Increase, 1902–03	188	..	217	2,532	4,759	7,341
Decrease, 1902–03	..	355	..	..	..	..

* Including 464 mules and asses in 1903, and 406 in 1902.

Classified according to breed, the numbers for the two years under review are :—

	1902–1903.	1901–1902.
Thoroughbred	6,661	6,545
Hunter and hackney	23,483	26,736
Carriage and trotting	19,897	19,899
Light ordinary	120,284	114,321
Draught	104,146	99,604
Ponies under 14 hands	12,484	12,567
Mules and asses	464	406
Totals	287,419	280,078

It has long been expected that the export of New Zealand horses to Australia and India would assume large proportions. So far, however, the trade has not developed to the extent anticipated. The opinion has been often expressed that more might be done than has been in the past. The following figures will show the position for the years 1885, 1890, 1895, 1896, 1898, and 1900 to 1902 :—

Exported to	1885.	1890.	1895.	1896.	1898.	1900.	1901.	1902.
Victoria	133	92	10	22	41	29	38	40
New South Wales	2,687	197	53	53	39	19	55	56
Queensland	..	..	..	..	..	2	..	..
Tasmania	113	27	1	1	1	9	5	4
Fiji	32	57	12	2	3	16	50	27
Bengal	34	235	94	151	116	69	106	147
Brazil	..	2	..	..	..	..	..	..
South Sea Islands	13	18	15	14	9	8	8	3
United Kingdom	..	..	5	6	1	3	1	..
United States of America (W. Coast)	10	..	3	..	..	1	..	..
Cape Colony	..	..	..	..	..	600	2	..
Natal	..	..	..	..	..	..	..	1,031
	3,022	628	193	249	210	756	265	1,308

Pigs.

Pigs have decreased since 1891, when the number was 308,812, against 193,740 in 1902–1903. The figures given in the accompanying table are those compiled by the Agricultural Department, and for 1902–1903 show a decrease of 30,284 in the total number of pigs kept in the previous year. The Auckland Provincial District has far more pigs than any other.

NUMBER OF PIGS IN EACH PROVINCIAL DISTRICT.

Provincial District.	Boars for Stud Purposes.	Barrows and Sows over One Year old, for Fattening.	Sows kept solely for Breeding Purposes.	Barrows and Sows under One Year old.	Totals.
Auckland ..	1,511	8,881	8,353	35,888	54,633
Taranaki ..	474	1,516	2,843	14,782	19,615
Hawke's Bay ..	207	864	1,178	6,017	8,266
Wellington ..	952	2,138	5,383	26,546	35,019
Marlborough ..	75	410	429	2,237	3,151
Nelson	173	631	985	5,830	7,619
Westland ..	37	335	148	892	1,412
Canterbury ..	744	1,759	5,119	33,483	41,105
Otago	543	2,416	2,772	17,189	22,920
Totals, 1902–1903	4,716	18,950	27,210	142,864	193,740
1901–1902	4,983	21,955	30,150	166,936	224,024
Decrease, 1902–03	267	3,005	2,940	24,072	30,284

The approximate numbers of the different breeds were :—

	1902–1903.	1901–1902.
Pure Berkshire	30,192	34,891
Pure Yorkshire	2,798	3,549
Other pure-breds	1,182	2,194
Crosses	159,568	183,390
Totals	193,740	224,024

SECTION XXI.—VITAL STATISTICS.

Births.

The number of births registered in the colony during 1902 was 20,655, or 25·89 in every 1,000 persons living. The rate is lower than in 1901, though slightly higher than those for the three years 1900, 1899, and 1898. From 1882 until the year 1899 there was a regular fall. The number of births registered in a year reached 19,846 in 1884, after which it fell to 17,876 in 1892, rising year by year to 18,955 in 1898, falling in 1899 to 18,835, but again rising to 19,546 in 1900, 20,491 in 1901, and 20,655 in 1902.

☞ The figures for each year from 1882 are worthy of notice, especially in connection with the subsequent particulars given as to marriages solemnised and the growth of population :—

Year.	Number of Births.	Rate per 1,000 of Population.	Year.	Number of Births.	Rate per 1,000 of Population
1882	19,009	37·32	1893	18,187	27·50
1883	19,202	36·28	1894	18,528	27·28
1884	19,846	35·91	1895	18,546	26·78
1885	19,693	34·35	1896	18,612	26·38
1886	19,299	33·15	1897	18,737	25·96
1887	19,135	32·09	1898	18,955	25·74
1888	18,902	31·22	1899	18,835	25·12
1889	18,457	30·07	1900	19,546	25·60
1890	18,278	29·44	1901	20,491	26·34
1891	18,273	29·01	1902	20,655	25·89
1892	17,876	27·83			

The marriages have increased numerically, and the population of the colony also.

Year.	Number of Marriages.	Mean Population (excluding Maoris).	Year.	Number of Marriages.	Mean Population (excluding Maoris).
1881	3,277	493,482	1892	4,002	642,245
1882	3,600	509,309	1893	4,115	661,349
1883	3,612	529,292	1894	4,178	679,196
1884	3,800	552,590	1895	4,110	692,417
1885	3,813	573,362	1896	4,843	706,846
1886	3,488	582,117	1897	4,928	721,609
1887	3,563	596,374	1898	5,091	736,260
1888	3,617	605,371	1899	5,461	749,984
1889	3,632	612,716	1900	5,860	763,594
1890	3,797	620,780	1901	6,095	777,968
1891	3,805	629,783	1902	6,394	797,793

In the year 1881 there were in New Zealand 5·72 births to every marriage in the previous year, in 1901 the proportion had fallen to 3·50 births to each marriage, and in 1902 to 3·23.

In the Australian States a similar decrease is noticeable. In Victoria the number of children to a marriage for the year 1880 was 4·99, but fell to 4·05 in 1898. In New South Wales the figures are 5·0 and 4·11 for the same years respectively.

The average number of children born to a marriage for the decennial period 1891–1900 was, in New South Wales, 4·79; Victoria, 4·39; and in New Zealand, 3·87. In England and Wales for the period 1890–99 the average was 4·09, in Scotland 4·36, and in Ireland 4·83.

New Zealand had in 1880 the highest birth-rate (40·78); in 1900 the case was reversed; but in 1901 and 1902 the New Zealand rate was higher than that of Victoria and South Australia.

The fall over ten years is calculated as under:—

BIRTH-RATES PER 1,000 OF POPULATION.

State or Colony.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Queensland	33·73	31·86	32·85	30·06	29·92	28·28	27·31	30·21	28·28	27·68
New South Wales ..	33·33	31·48	30·66	28·35	28·42	27·14	27·10	27·43	27·60	27·17
Victoria	31·28	29·16	28·56	27·33	26·59	25·72	26·71	25·82	25·77	25·23
South Australia ..	31·76	30·49	30·23	28·46	26·97	24·98	25·51	25·78	25·39	24·85
Western Australia ..	34·22	28·27	26·30	22·65	25·82	29·35	30·64	31·46	30·32	..
Tasmania	33·92	31·11	30·09	28·16	27·73	26·24	25·98	28·25	28·40	33·05
New Zealand	27·50	27·28	26·78	26·33	25·96	25·74	25·12	25·60	26·34	25·89

This table also shows that although New Zealand had in 1900 the lowest birth-rate in Australasia, the fall has been much less in this colony since 1892 than in the others, with the exception of Tasmania.

A declining birth-rate is noticeable in many civilised countries, and attention has been drawn by statisticians and political economists to the serious consequences that may result. That fertility among women in New Zealand is decreasing, from whatever causes, further facts will tend to show.

Taking the number of married women in New Zealand at what may be considered the child-bearing ages (*i.e.*, from fifteen to forty-five years, inclusive) as shown by each census since 1878, and for the same years the number of legitimate births (excluding plural) registered, the birth-rate per 1,000 married women of the above-stated ages is easily found, and is shown to be steadily declining. In 1878 the rate was 337 per 1,000, in 1896 it had fallen to 252, and in 1901 to 244; or, in other words, in 1878 one married woman of the ages specified in every three gave birth to a child, while in 1901 the rate was one in four only. The figures for each census year are given below, and are followed by a table showing the declining birth-rate, and the increase in the marriage-rate, in the United Kingdom.

BIRTH-RATES (LEGITIMATE) PER 1,000 MARRIED WOMEN AT CHILD-BEARING AGES FOR EACH CENSUS YEAR, 1878 TO 1901.

Year (Census).	Number of Married Women between 15 and 45 Years of Age.	Number of Legitimate Births (Confinements).	Birth-rate per 1,000 Married Women of from 15 to 45 Years of Age.
1878	50,995	17,196	337·2
1881	57,458	18,003	313·3
1886	62,704	18,532	295·5
1891	63,165	17,455	276·3
1896	69,807	17,596	252·1
1901	79,406	19,355	243·8

BIRTH AND MARRIAGE RATES IN THE UNITED KINGDOM, 1887, 1891, 1896, AND 1901.

Year.	Mean Population.	Births.		Marriages.	
		Number.	Rate per 1,000 of Population.	Number.	Rate per 1,000 of Population.
1887 ..	36,599,143	1,123,149	30·69	246,339	6·73
1891 ..	37,806,773	1,148,259	30·37	275,970	7·30
1896 ..	39,644,147	1,152,144	29·06	296,089	7·47
1901 ..	41,546,698	1,162,414	27·98	312,532	7·52

The above figures are taken from the "Statistical Abstract for the United Kingdom" (49th number), published in August, 1902.

The birth-rates for ten years in Great Britain and certain countries of the European Continent are given from the report of the Registrar-General of England. The rates in England and Wales, and in Scotland, are higher than those in New Zealand, but the rate for Ireland is lower. For 1891 and following years France has the lowest rate of all quoted:—

BIRTH-RATES IN EUROPEAN COUNTRIES, 1891 TO 1900.

Countries.	Number of Births per 1,000 of Mean Population.									
	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
Hungary ..	42·3	40·4	42·6	41·5	41·9	40·5	40·3	37·7	39·3	39·3
Austria ..	37·0	36·2	37·9	36·7	38·1	38·0	37·5	36·2	37·1	..
Italy ..	37·0	36·1	36·4	35·4	34·7	34·7	34·6	33·4	33·8	32·9
German Empire	37·0	35·7	36·8	35·9	36·1	36·3	36·0	36·1	35·8	35·6
Netherlands ..	33·7	32·0	33·8	32·7	32·8	32·7	32·5	31·9	32·0	31·5
Scotland ..	31·2	30·7	30·8	29·9	30·0	30·4	30·0	30·1	29·8	29·6
Norway ..	30·9	29·6	30·7	29·8	30·6	30·4	30·0	30·3	30·9	30·1
England and Wales	31·4	30·4	30·7	29·6	30·2	29·6	29·5	29·3	29·1	28·7
Belgium ..	29·6	28·9	29·5	29·0	28·5	29·0	29·0	28·6	28·8	28·9
Sweden ..	28·3	27·0	27·4	27·1	27·5	27·2	26·7	27·1	26·4	26·9
Switzerland ..	27·8	27·4	27·7	27·1	27·1	27·9	28·1	28·4	28·9	28·6
Ireland ..	23·1	22·5	23·0	22·9	23·2	23·6	23·5	23·2	22·9	22·7
France ..	22·6	22·3	22·7	22·3	21·7	22·5	22·3	21·8	21·9	21·4

From the year 1895 marriages have shown an increase, the rate being then 5·94 per 1,000 of population. In 1902 the rate rose to 8·01, the highest record since 1876, when it was 8·25 per 1,000 of mean population. The number of marriages solemnised in 1902 was 6,394, an increase of 299 on the number for 1901.

MARRIAGE-RATES IN AUSTRALASIA PER 1,000 OF POPULATION.

	1874.	1886.	1891.	1896.	1898.	1899.	1900.	1901.
Queensland	8·62	8·67	7·18	6·05	6·03	6·78	6·88	6·61
New South Wales ..	7·70	7·99	7·39	6·59	6·66	6·89	7·38	7·68
Victoria	6·33	7·84	7·69	6·48	6·53	7·01	6·96	6·99
South Australia ..	8·00	6·24	7·31	6·20	6·18	6·24	6·50	6·44
Western Australia ..	6·96	7·98	8·00	8·45	9·89	9·89	10·27	9·65
Tasmania	6·83	7·26	6·63	5·88	6·29	6·37	7·71	7·68
New Zealand ..	8·81	5·99	6·04	6·85	6·91	7·28	7·67	7·83

In April, 1896, New Zealand had 83,659 children living under the age of five years, and in March, 1901, the number was 86,806, an increase of 3,147, although the population at all ages increased in the quinquennium by 9·86 per cent. Between 1886 and 1891 the children living under five years actually decreased in number by 3,624, the increase of population of all ages (8·33 per cent.) being less than between 1891 and 1896 (12·24 per cent.), or 1896 and 1901 (9·86 per cent.). The number of children under one year to the total population at all ages, according to the results of four censuses, was :—

	Children under One Year.	Total Population (all Ages).
Census 1886	18,355	578,482
" 1891	16,443	626,658
" 1896	17,070	703,360
" 1901	18,381	772,719

Thus, in 1886, with a population of 578,482 persons, there were 18,355 children under one year, against 18,381 children of that age in 1901, with a population of 772,719 persons.

The births registered in 1885 were 19,693, against 19,546 in 1900. The birth-rate fell from 34·35 per 1,000 of the population in 1885 to 25·60 in 1900.

Deducting 1,469, the number of deaths of children under one year registered in 1900, from 19,546, the number of births for that year, leaves 18,077, or within 304 of the living children under one year at the time of the last census.

TWIN BIRTHS.

There were 220 cases of twin births (440 children), and triplets were registered in two instances, in 1902. The number of children born was 20,655; the number of mothers was 20,431: thus, on an average, one mother in every 93 gave birth to twins, against 107 in 1901, 102 in 1900, 106 in 1899, 97 in 1898, and 101 in 1897 and 1896. In 1895 the proportion was one in 93, and in 1894 one in 103.

ILLEGITIMACY.

The births of 921 children were illegitimate: thus 45 in every 1,000 children born were born out of wedlock, against 46 in 1901.

The following table gives the rates of illegitimacy in Australasia. The rate in 1901 in New Zealand is less than in any of the Australian States except Western Australia and South Australia:—

PROPORTION OF ILLEGITIMATE BIRTHS IN EVERY 100 BIRTHS.

Year.	Queensland.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1890	4·85	5·26	5·09	2·50	..	4·05	3·30
1891	4·65	5·36	5·36	2·93	..	3·72	3·49
1892	5·05	5·71	5·59	2·93	5·89	4·75	3·32
1893	4·97	6·16	5·46	2·84	4·17	4·41	3·70
1894	4·52	6·14	5·50	3·05	4·66	5·09	3·80
1895	4·93	6·51	5·33	3·13	4·47	4·97	4·50
1896	5·22	5·71	5 63	3·45	5·61	5·91	4·48
1897	6·02	6·58	5·42	3·53	5·27	5·74	4·41
1898	6·04	6·93	5·29	3·62	4·99	5·09	4·23
1899	5·97	7·15	5·49	3·95	4·91	6·08	4·40
1900	6·40	7·01	5·91	4·24	4·82	5·43	4·63
1901	5·93	7·16	5·58	3·98	3·88	5·94	4·57
1902	6·04	6·60	5·51	4·36	..	5·36	4·46

These figures show a rise in the proportion of illegitimate births to every 100 births for this colony, amounting to 1·16 for the period 1890–1902.

The total number of births registered was 19,299 in 1886 and 20,655 in 1902, while the illegitimate births rose from 602 to 921. The causes that led to the fall in the birth-rate certainly did not greatly affect the number of illegitimate children.

The number of spinsters in the colony between 15 and 45 increased during the ten years from 65,035 (census 1891) to 100,310 (census 1901), or at the rate of 55·9 per cent., while the illegitimate births increased from 638 to 937, or at the rate of 46·9 per cent. only.

It would therefore appear that the larger proportion of illegitimate births now obtaining cannot with any certainty be taken as indicative of increased looseness of living on the part of the people.

The following figures, taken from "The Wealth and Progress of New South Wales, 1900–1901," showing the rate of illegitimacy per 100 births in Australasia and in the United Kingdom, are based on statistics for a period of five years:—

Country.	Illegitimate Births per Cent.	Country.	Illegitimate Births per Cent.
New South Wales ..	6·88	Tasmania	5·65
Victoria	5·55	New Zealand	4·42
Queensland	5·94	England and Wales ..	4·15
South Australia ..	3·76	Ireland	2·65
Western Australia ..	5·06	Scotland	6·97

Of the total number of children born in Australasia during the five years ended 1901, 5·75 per cent. were illegitimate, as compared with 4·42 per cent. in the United Kingdom for the period 1896–1900.

The figures in the next table, which give the percentages of illegitimate births in a number of foreign countries, also cover in most cases a period of five years, 1897–1901.

Country.	Illegitimate Births per Cent.	Country.	Illegitimate Births per Cent.
Germany	9·08	France	8·82
Prussia	7·68	Belgium .. .	7·67
Bavaria	13·43	Netherlands	2·60
Saxony	12·89	Sweden	11·13
Austria	14·20	Norway	7·43
Hungary	9·13	Italy	6·45

For England and Wales the proportion of illegitimate births to the total births in 1900 was 4 per cent., having gradually diminished from 7 per cent. in 1845. The minimum rate was 2·7 per cent., in Essex, and the maximum 6·7 per cent., in Westmoreland. For London the percentage was 3·6.

The average proportion of illegitimate births in Scotland in 1901 was 6·3 per cent., the rate varying from 3·4 per cent. in Dumbartonshire to 13·7 in Wigtownshire; but in Ireland in that year the extremely low average of 2·6 per cent. obtained, the rate varying from 0·7 in Connaught to 3·4 in Ulster.

The Legitimation Act.

An important Act was passed in 1894, entitled the Legitimation Act, which makes provision for the legitimation of children born before marriage on the subsequent marriage of their parents. Under this Act any child born out of wedlock, whose parents afterwards marry, is deemed to be legitimised by such marriage on the birth being registered in the manner prescribed by the Act. For legitimation purposes Registrars must register a birth when called upon to do so by any person claiming to be the father of an illegitimate child; but such person is required to make a solemn declaration that he is the father, and that at the time of the birth there existed no legal impediment to his marriage with the mother of the child. He has also to produce the evidence of his marriage. It will thus be seen that in cases dealt with under the Act registration becomes the test of legitimacy. In the December quarter of 1894, 11 children were legitimised; in 1895 the number was 68; in 1896, 56; in 1897, 48; in 1898, 59; in 1899, 41; in 1900, 62; in 1901, 47; and in 1902, 96; making altogether 488 legitimations since the passing of the law.

"THE INFANT LIFE PROTECTION ACT, 1896."

By this statute it has been rendered unlawful for a person to take charge, for payment, of an infant to maintain or nurse for more than three days without holding a license as an infants' home keeper. The house of such a person must be registered as an infants' home.

The administration of this law is a matter entirely managed by the police. The licensed homes are periodically inspected, and the results have shown that licensees generally comply with the required conditions, the homes and infants being well looked after.

The Commissioner in his report for the year ended 31st March, 1902, writes:—

During the year there were 565 registered homes throughout the colony, representing 943 infants, against 548 homes and 872 infants in 1900.

Twenty-nine deaths occurred in the homes during the year, against twenty-six in the preceding year, being equal to 30·75 per thousand, against 29·81 per thousand in 1900.

The mortality throughout the colony of infants under four years of age (the age to which the Act applies) was 26·37 per thousand, or only 4·38 less than in the homes. This, I submit, may be regarded as satisfactory, considering that the infants in the homes are reared artificially, and that a very large percentage, through being illegitimate, have not received, prior to being admitted to the homes, the careful nurturing that infants brought into the world under more favourable conditions are likely to receive, and are weakly in consequence.

Eleven licensees were prosecuted for breaches of the Act during the year, of whom ten were convicted, and two licenses were cancelled.

BIRTHS AND BIRTH-RATES IN THE FOUR CHIEF CITIES.

The total number of births registered as occurring in the four chief centres and suburbs in 1902 was 5,347, as against 5,234 for the previous year.

The births in the four cities rose from 3,161 in 1901 to 3,196 in 1902, and in the suburban boroughs from 2,073 to 2,151. The birth-rates for 1902 were:—

	Birth-rates per 1,000 of Mean Population.	
Auckland City	30·80	
" and five suburban boroughs ..	..	29·64
Wellington City	25·29	
" and three suburban boroughs ..	..	25·92
Christchurch City	25·84	
" and four suburban boroughs ..	..	26·36
Dunedin City	19·96	
" and eight suburban boroughs ..	..	23·08

Thus, by the inclusion of the suburbs the rate is raised at Wellington, Christchurch, and Dunedin, but lowered at Auckland. It will be observed that Auckland has the highest rate, Christchurch next highest, Wellington and Dunedin following with intervals. The difference between the Auckland rate (29·64) and the Dunedin rate (23·08) is considerable. The birth-rate for the whole colony for 1902 was 25·89 per thousand. Auckland, Christchurch, and Wellington are thus over the average, and Dunedin below it.

Taking the births in the four chief boroughs without their suburbs, and comparing the numbers for 1902 and 1901, an in-

crease for 1902 is observed at Auckland of 60, at Christchurch of 50, but a decrease of 24 at Wellington and of 51 at Dunedin. The figures for the last five years are :—

	1898.	1899.	1900.	1901.	1902.
Auckland (without suburbs) ..	916	988	1,028	1,037	1,097
Wellington " ..	1,065	1,036	1,127	1,150	1,126
Christchurch " ..	390	340	417	423	473
Dunedin " ..	507	490	526	551	500

The birth-rates for two of the chief boroughs in 1902 show a rise, and for two a decrease, when compared with 1901. In Auckland the rate rose from 30·00 to 30·80, and in Christchurch from 24·12 to 25·84; but fell in Wellington from 26·35 to 25·29, and in Dunedin from 22·04 to 19·96. The rates for five years, 1898 to 1902, are as follows :—

	Births per 1,000 of Population.				
	1898.	1899.	1900.	1901.	1902.
Auckland (without suburbs) ..	26·96	25·77	29·31	30·00	30·80
Wellington " ..	25·75	24·24	25·76	26·35	25·29
Christchurch " ..	22·07	18·74	21·51	24·12	25·84
Dunedin " ..	21·61	20·82	22·07	22·04	19·96

Naturalisation.

Aliens residing in the colony may, on taking the oath of allegiance to His Majesty, obtain letters of naturalisation entitling them to enjoy all the rights and privileges that a natural-born subject of the United Kingdom can enjoy or transmit within this colony. Three hundred and twenty-two aliens (310 men and 12 women) were naturalised in 1902.

The number belonging to each nationality was as under :—

Number of Aliens naturalised in 1902.

Natives of—	M.	F.	Natives of—	M.	F.
German Empire	76	6	United States of America	9	0
Norway and Sweden ..	71	1	Netherlands	3	0
Denmark	31	4	Switzerland	5	0
Russia, Poland, and Finland	29	0	Belgium	2	0
France and possessions ..	11	0	Portugal and possessions ..	9	0
Italy	16	0	Turkey and Syria ..	2	0
Austria-Hungary ..	39	1	Brazil	1	0
China	5	0	West Indies	1	0

The number of natives of each country naturalised during the last twenty years is next shown,—

Natives of—		Natives of—	
Germany	1,495	Netherlands	53
Sweden and Norway ..	1,115	Greece	45
Denmark	793	Portugal	53
China	326	United States of America ..	71
Italy and Sicily	194	Belgium	28
Switzerland	163	Other countries	88
Russia in Europe ..	213		
Austria-Hungary	225	Total	4,986
France	124		

By section 2 of "The Aliens Act Amendment Act, 1882," repealed and re-enacted by section 2 of "The Aliens Act Amendment

Act, 1892," it is provided that when the father, or mother being a widow, has obtained naturalisation in the colony, every child who during infancy has become resident with them in New Zealand shall be deemed to be naturalised, and shall have the rights and privileges of a natural-born subject.

MARRIAGES.

The marriages for 1902 show an increase on the number for the previous year. The number was 6,394, or 299 more than in 1901. The marriage-rate rose from 7·83 per 1,000 persons living in 1901 to 8·01 in 1902, the rate for the latter year being the highest obtained since 1876, when it stood at 8·25 per 1,000 persons. The improvement shown during the last seven years sets New Zealand in a good position relatively to the Australian States.

The rates for a series of fifteen consecutive years were:—

MARRIAGES PER 1,000 OF THE POPULATION.

Year.	Queensland.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1888 ..	8·63	7·37	8·03	6·70	7·18	6·58	5·97
1889 ..	8·37	6·76	8·14	6·47	6·99	6·50	5·94
1890 ..	8·49	7·14	8·21	7·06	5·80	6·64	6·12
1891 ..	7·18	7·39	7·69	7·31	8·00	6·63	6·04
1892 ..	6·67	6·77	6·64	6·51	7·29	6·51	6·23
1893 ..	5·91	6·40	5·99	6·26	6·34	5·51	6·22
1894 ..	5·70	6·20	5·98	6·09	6·24	5·43	6·15
1895 ..	6·23	6·35	6·00	5·88	6·83	5·32	5·94
1896 ..	6·05	6·59	6·48	6·20	8·45	5·88	6·85
1897 ..	6·05	6·72	6·36	5·46	10·73	6·23	6·83
1898 ..	6·03	6·66	6·53	6·18	9·89	6·29	6·91
1899 ..	6·78	6·89	7·01	6·24	9·89	6·37	7·28
1900 ..	6·88	7·38	6·96	6·50	10·27	7·71	7·67
1901 ..	6·61	7·68	6·99	6·44	9·65	7·68	7·83
1902 ..	6·31	7·53	7·02	6·61	..	7·47	8·01

But the improved rate for this colony is still lower than the rate for some few European countries.

MARRIAGES IN EVERY 1,000 OF THE POPULATION.

German Empire	1900 ..	8·5
Belgium	1900 ..	8·6
Hungary	1900 ..	8·9
England and Wales	1900 ..	8·0
Switzerland	1900 ..	7·7
Austria	1900 ..	8·0
Spain	1900 ..	8·9
Denmark	1900 ..	7·6
Scotland	1900 ..	7·3
France	1900 ..	7·8
Netherlands	1900 ..	7·6
Italy	1900 ..	7·2
Norway	1900 ..	7·0
Sweden	1900 ..	6·2
Ireland	1900 ..	4·8

Of the marriages solemnised in 1902, 5,803 were between bachelors and spinsters, 199 between bachelors and widows, 292 between widowers and spinsters, and 100 between widowers and widows.

Divorced men and women have been classified as bachelors or spinsters: 25 divorced men and 51 divorced women were married during the year.

Included amongst spinsters are ten married women, and amongst the bachelors two married men, who elected to go through the form of marriage with other persons under the protection of the provisions of section 204, subsection (5), of "The Criminal Code Act, 1893," which runs: "No one commits bigamy by going through a form of marriage if he or she has been continually absent from his or her wife or husband for seven years then last past, and is not proved to have known that his wife or her husband was alive at any time during those seven years."

The total number of marriages solemnized (6,394) does not include marriages where both parties are of the aboriginal native race, such persons being exempted from the necessity of complying with the provisions of the Marriage Act, although at liberty to take advantage thereof. Eleven marriages in which both parties were Maoris were contracted in 1902 in terms of the Act: 4 by Registrars, 6 by clergymen of the Church of England, and 1 by a Wesleyan minister.

Bachelors and Spinsters in New Zealand.

The results of three censuses in respect of the number of bachelors of 20 years and upwards, and spinsters of 15 years and upwards, in the colony show some interesting features. In 1891 there was an excess of bachelors over the spinsters amounting to 3,497 men. But by 1896 not only had the preponderance of the male element been lost, but an excess of spinsters over bachelors was reported amounting to 1,786 women, while in 1901 this excess had risen to 3,572 women.

It is noticeable how differently the numbers for the provincial districts have been affected by the process in operation. An excess of bachelors was preserved in Auckland, Taranaki, Hawke's Bay, Wellington, Marlborough, Nelson, and Westland from 1891 to 1901. In Canterbury, however, an excess of spinsters was found in 1891 of 2,516, which increased to 3,997 in 1896 and to 4,918 in 1901; while in Otago an excess of 773 spinsters in 1891 increased to 2,066 in 1896, and diminished slightly in 1901, when there were 1,899 more spinsters than bachelors. These two important districts of the Middle Island have lost large numbers of bachelors by departures to the North Island.

The following table exhibits the particulars for each provincial district:—

Provincial Districts.	Census, 1891.		Census, 1896.		Census, 1901.	
	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.
Total excess ..	3,497	..	..	1,786	..	3,572
Auckland ..	156	..	703	..	521	..
Taranaki ..	121	..	524	..	805	..
Hawke's Bay ..	1,337	..	1,142	..	425	..
Wellington ..	2,129	..	637	..	32	..
Marlborough ..	644	..	183	..	158	..
Nelson	1,486	..	580	..	637	..
Westland ..	900	..	501	..	666	..
Canterbury ..	..	2,516	..	3,997	..	4,918
Otago	..	773	..	2,066	..	1,899
Chatham Islands	15	..	7	..	1	..
Kermadec Islands	..	2	..	..	..	..

MARRIAGES BY MINISTERS OF VARIOUS DENOMINATIONS.

Of the marriages in the year 1902, 24·58 per cent. were solemnised by ministers of the Church of England, 25·95 per cent. by ministers of the Presbyterian Churches, 12·95 per cent. by ministers of the Wesleyan and other Methodist Churches, 9·94 per cent. by ministers of the Roman Catholic Church, 10·07 per cent. by ministers of other denominations, and 16·51 per cent. by Registrars.

The following shows the proportions of marriages by ministers of the principal denominations in the past eight years, and the percentages of these denominations to the total population :—

Denomination.	Percentage of Marriages.								Percentage of Denomination to Total Population in 1901.
	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	
Church of England	22·74	22·86	23·00	23·37	24·17	22·68	24·91	24·58	40·84
Presbyterians ..	24·32	25·01	25·44	26·02	25·30	26·38	24·48	25·95	22·87
Methodists ..	15·69	17·92	17·61	13·98	12·91	13·23	13·19	12·95	10·86
Roman Catholics ..	11·19	10·26	10·12	10·37	10·87	10·82	10·53	9·94	14·23
Other denominations	7·29	6·05	5·86	9·25	9 34	10·20	10·20	10·07	11·20
By Registrars ..	18·77	17·90	17·97	17·01	17·41	16·69	16·69	16·51	..
	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00

Marriage by the Registrar is found to be less frequent than it was eight years ago, the percentage falling from 18·77 in 1895 to 16·51 in 1902.

Marriage Register signed by Mark.

Of the men married in 1902, 16, or 2·50 in every 1,000, and of the women 28, or 4·38 per 1,000, signed the register by marks.

The illiteracy of the people, as measured by the proportion of married persons who affix marks instead of signatures to the marriage register, has greatly decreased of late, having fallen since 1881 from 32·04 per 1,000 among men to 2·50 per 1,000, and from 57·98 per 1,000 to 4·38 per 1,000 among women. This is shown in a very striking manner by the following table:—

Persons in every 1,000 married who signed by Mark.

Denomination.	1881.		1891.		1901.		1902.	
	M.	F.	M.	F.	M.	F.	M.	F.
Church of England ..	16·59	27·15	8·29	10·66	1·32	3·29	1·91	1·91
Presbyterians ..	10·25	29·61	5·79	8·69	2·68	4·69	1·81	1·81
Wesleyans and other Methodists	32·41	41·79	8·93	10·71	3·73	3·73	1·21	6·04
Roman Catholics ..	117·78	133·33	31·33	18·28	6·23	7·79	..	4·72
Other denominations	10·36	20·72	9·26	..	1·61	3·22	8·00	4·00
By Registrars ..	39·22	93·51	27·42	43·08	13·77	15·73	6·63	12·31
Total marriages	32·04	57·98	13·93	16·82	4·59	6·23	2·50	4·38

The proportion of illiterates in 1901 and 1902 was greatest among those married before Registrars. Previously the proportion was largest among Roman Catholics; but since 1881 it has, as shown by the table, most remarkably decreased.

Ages of Persons married.

Of the persons married in 1902, 89 bridegrooms and 1,061 brides were under 21 years of age—one of the bridegrooms was between 17 and 18, and six between 18 and 19. Of the brides, one was under 15 years of age, four were between 15 and 16, and twenty-seven between 16 and 17 years of age. The proportion of men married is greatest at the ages of 25 to 30, and of women at from 21 to 25 years.

The following are the proportions of men and women married at each age-period to every 100 marriages in the years 1891, 1901, and 1902:—

Age.	1891.		1901.		1902.	
	M.	F.	M.	F.	M.	F.
Under 21 years	1·55	20·79	1·93	17·16	1·39	16·59
21 and under 25	26·99	43·99	24·94	39·97	24·93	40·60
25 „ 30	36·19	22·97	37·08	26·89	38·43	26·90
30 „ 40	25·94	8·72	27·12	12·73	27·18	12·84
40 „ 50	6·44	2·71	6·04	2·44	5·14	2·00
50 „ 60	2·26	0·66	1·77	0·57	1·86	0·72
60 „ 70	0·55	0·16	0·92	0·24	0·88	0·30
70 and upwards	0·08	..	0·20	..	0·19	0·05

Registrars of Marriages are prohibited by law from issuing certificates for the marriage of minors without the consent of their

parents or lawful guardians, if there be any in the colony. If a declaration be made in any case that there is no parent or lawful guardian in the colony, then a certificate may be issued after the expiration of fourteen days following the date on which the notice of intended marriage is given.

A marriage may not be solemnised except after the delivery to the minister or Registrar who officiates of a certificate issued by a Registrar authorising such marriage, and if any persons knowingly and wilfully intermarry without such certificate the marriage is null and void; and no clergyman or minister of any denomination is empowered to solemnise marriages until his name has been placed on the Registrar-General's list of officiating ministers for the year.

Marriage with a deceased wife's sister in New Zealand was legalised in the year 1880, and an Act was passed in the year 1900 which legalised marriage with the brother of a deceased husband. This Act is retrospective, including in its provisions marriages between such parties which had previously been solemnised as well as those contracted after the statute was passed, and declaring all these to be valid, and the issue born prior or subsequent to the passing of the Act to be deemed born in lawful wedlock.

The measure was reserved for the signification of her late Majesty's pleasure. The Royal assent has since been given, and the Act came into force in New Zealand by Proclamation dated the 22nd May, 1901.

The ages at which persons may contract binding marriages are the same as in England—12 years for females and 14 for males. Marriage may be contracted at earlier ages than those stated, but would be voidable at the discretion of either of the parties upon reaching the age of 12 or 14, as the case may be, and without the necessity of proceedings in Court.

Although in New Zealand the age at which girls may legally marry is as above, nevertheless, by the criminal law, to unlawfully carnally know a girl under the age of 16 years is now a punishable offence. The age of consent was raised from 15 to 16 by statute passed in 1896.

The average age of the men married in this colony in 1902 was 28·89 years, and of the women 25·63 years. In England the mean age of those whose ages were stated was (in the year 1900) 28·41 years for men, and 26·29 years for women. Thus the average age at marriage in the colony is higher for men, but lower for women, than in England.

The proportion of bridegrooms under 21 is much greater in England than in New Zealand; but the proportion of brides under 21 is greater in the colony.

In England, in 1900, of every 1,000 bridegrooms whose ages were stated, 51 were under 21 years of age, and of every 1,000 brides 163 were under 21 years of age. In New Zealand, in 1902, the proportions were 14 bridegrooms and 166 brides of similar ages in every 1,000 married:—

Year.	Bridegrooms under 21 in every 100.	Brides under 21 in every 100.	Year.	Bridegrooms under 21 in every 100	Brides under 21 in every 100.
1888	1·85	24·30	1898	1·57	18·13
1890	1·89	22·75	1899	2·10	18·81
1892	1·62	20·14	1900	1·67	17·34
1894	1·44	19·53	1901	1·93	17·16
1896	1·96	19·51	1902	1·39	16·59

Number of Ministers.

The number of names on the list of officiating ministers under the Marriage Act is (May, 1903) 1,024, and the denominations to which they belong are shown hereunder :—

Denomination.	No.	Denomination.	No.
Church of England	322	Auckland Society of the New Church	1
Presbyterian Church of New Zealand	220	Auckland Central Mission	1
Roman Catholic Church	169	Wellington Central Mission	1
Methodist Church of Australasia	167	Independent Free Church	1
Congregational Independents	22	The Forward Movement	1
Baptists	30	Salvation Army	10
Primitive Methodist Connexion	37	Catholic Apostolic Church	4
Lutheran Church	8	Seventh-day Adventists	3
Hebrew Congregations	6	Unitarian Church	1
Church of Christ	14	Pilgrims of Peace	1
Free Methodist Church of New Zealand	4	Scots Church	1
		Total	1,024

Deaths.

The deaths in 1902 numbered 8,375, being equivalent to a rate of 10·50 in every 1,000 persons living, as against 9·81 in 1901. The lowest rate experienced since the year 1887, when the deaths were 10·29 per 1,000 of the population, was that for 1896 (9·10).

Comparative Death-rate for the Period 1892 to 1902.

Country.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
New Zealand	10·06	10·23	10·19	9·91	9·10	9·14	9·84	10·24	9·43	9·81	10·50
Queensland	12·66	13·34	12·08	11·38	12·10	11·33	12·66	12·07	11·73	11·88	12·08
New South Wales	12·20	13·24	12·36	11·79	12·30	10·88	12·48	11·82	11·16	11·68	11·95
Victoria	13·63	14·11	13·14	13·25	13·35	12·90	15·94	14·28	12·75	13·22	13·40
South Australia*	11·41	13·44	11·64	11·25	11·48	11·24	13·06	12·14	10·64	11·11	11·79
Western Australia	16·67	15·31	14·40	17·78	16·45	16·97	16·05	13·76	12·92	13·36	..
Tasmania	13·53	13·47	12·42	11·38	11·63	11·53	13·51	12·25	11·05	10·45	10·84
England and Wales	19·0	19·1	16·5	18·7	17·0	17·4	17·5	18·2	18·2	..	..
Scotland	18·5	19·3	17·1	19·4	16·6	18·4	18·0	18·1	18·5	..	..
Ireland	19·4	17·9	18·2	18·4	16·6	18·4	18·1	17·6	19·6	..	..
Denmark	19·4	18·8	17·4	16·8	15·6	16·5	15·5	17·3	16·9	..	..
Norway	17·8	16·3	16·9	15·7	15·2	15·3	15·3	16·9	15·8	..	..
Sweden	17·9	16·8	16·4	15·2	15·6	15·4	15·1	17·7	16·8	..	..
Austria	28·8	27·2	27·8	27·7	26·4	25·6	24·9	25·4	..	..	..
Hungary	35·1	31·2	30·5	29·7	28·9	28·5	28·0	27·2	26·9	..	..
Switzerland	18·8	19·9	19·9	19·1	17·7	17·6	18·2	17·6	19 3	..	..
German Empire	24·1	24·6	22·3	22·1	20·8	21·3	20·5	21·5	22·1	..	..
Netherlands	21·0	19·2	18·5	18·6	17·2	16·9	17·0	17·1	17·8	..	..
France	22·8	22·5	21·2	22·2	20·0	19·5	20·9	21·1	21·9	..	..
Italy	26·1	25·1	24·9	25·0	24·0	21·9	22·9	21·8	23·7	..	..

* Excluding the Northern Territory.

As will be seen from the preceding table, covering a series of years, the death-rate in New Zealand contrasts very favourably with that in the Australian States and in European countries.

In this statement New Zealand is conspicuous as showing the lowest death-rate. The rates for the principal Australian States are a little higher, but, generally speaking, far below those for the United Kingdom or the European Continental States mentioned in the table.

Perfect accuracy in comparing one country or colony with another can only be attained by the use of what is termed an "index of mortality." The proportions of the living vary in regard to the different age-groups, and the ordinary death-rate—which is calculated on the population as a whole—does not afford a true means of judging of the relative healthiness of the places compared. But by taking a population like that of Sweden, and applying the percentage at each age-group to the death-rates, a standard of health or index of mortality can be arrived at. This has been done for New Zealand, in accordance with a resolution of the Statistical Conference held at Hobart in 1902, and the result is expressed in tabular form. When similar results are published by the States of Australia, comparisons will be given.

INDEX OF MORTALITY IN NEW ZEALAND FOR 1902.

Ages.	Estimated Mean Population, 1902.	Number of Deaths, 1902.	Death-rate per 1,000, 1902.	Percentage of Population of Sweden, 1890 (Standard).	Index of Mortality in New Zealand per 1,000.
Under 1 year ..	18,987	1,712	90·17	2·55	2·30
1 and under 20 years	334,914	1,194	3·57	39·80	1·42
20 and under 40 years	262,713	1,311	4·99	26·96	1·35
40 and under 60 years	127,248	1,458	11·46	19·23	2·20
60 years and upwards	53,931	2,700	50·06	11·46	5·74
Totals ..	797,793	8,375	10·50	100·00	13·01

DEATHS AND DEATH-RATES OF THE FOUR PRINCIPAL CITIES AND THEIR SUBURBS.

In the earlier annual reports on the vital statistics of the four chief towns the central boroughs alone were dealt with, particulars respecting the suburbs not having been obtained. But this omission was held to be a grave defect, as the suburban death-rate may differ much from the death-rate at the centre. Steps were therefore taken early in 1895 to collect statistics of the suburban boroughs as well as of the four chief cities. As regards Auckland and Christchurch, the whole of the area usually recognised as suburban has not yet been brought under municipal government, and the statistics given below do not deal with such portions as still remain in road districts. The omission, however, is not very important, for there

are in either case quite enough suburbs included within borough boundaries to give a fair idea of the death-rate of greater Auckland and greater Christchurch. As further boroughs are formed the vital statistics will be made to include them.

The total number of deaths registered for the four centres in 1902 was 2,598—viz., 1,694 in the cities, and 904 in the suburbs. In 1901 the number was 2,275: 1,465 in the cities, and 810 in the suburbs.

By including the suburbs the death-rate for last year is lowered at each of the four centres. The rates for the year are :—

	Death-rates per 1,000 of Mean Population.	
Auckland City	17·21	
" and five suburban boroughs ..		15·27
Wellington City	12·58	
" and three suburban boroughs ..		12·24
Christchurch City	12·24	
" and four suburban boroughs ..		12·14
Dunedin City	11·86	
" and eight suburban boroughs ..		11·29

MORTALITY AT FOUR CENTRES, INCLUDING SUBURBS.

If the suburbs are included, the death-rate is found to be highest in Auckland and lowest in Dunedin; Wellington and Christchurch taking second and third places respectively. The death-rate for the colony was 10·50 per 1,000 of mean population. The four centres might be expected to show a higher average than this.

If the number of deaths of infants under one year be excluded, the mortality among the rest of the population is found to have been for 1901 and 1902 in the following ratio to the 1,000 living :—

	1901.	1902.
Auckland (including suburbs)	8·65	11·10
Wellington "	7·60	8·87
Christchurch "	9·89	9·04
Dunedin "	9·70	9·23

The degree of infantile mortality is perhaps best shown in the proportion of deaths of children under one year of age to every 100 births. For 1901 and 1902 the proportions at the chief centres were,—

	1901.	1902.
Auckland (including suburbs)	9·88	14·07
Wellington. "	10·03	13·02
Christchurch "	11·02	11·76
Dunedin "	7·89	8·91

Thus in 1902 the proportions for Dunedin and Christchurch are less than those found at either of the other two chief cities. Again, the percentage of deaths of children under 5 years to the total number of deaths is—in Auckland, 38·47; in Wellington, 37·98; in Christchurch, 31·29; and in Dunedin, only 21·85. The total of deaths under 5 is 855, or 32·91 per cent. of all deaths, as against 618 and 27·16 per cent. for 1901. The deaths of persons of 65 and upwards numbered 599 last year; in 1901 they were 586.

Mortality at Four Centres, excluding Suburbs.

Excluding suburbs, and dealing with the deaths at all ages in the four cities or central boroughs only, the rates for 1902 are found to be higher in Auckland and Wellington, but lower in Christchurch and Dunedin, than in the previous year. The total number of deaths, and the death-rates, for four years are given :—

Cities (excluding Suburbs).	Deaths, 1899.		Deaths, 1900.		Deaths, 1901.		Deaths, 1902.	
	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.
Auckland ..	499	13·02	480	13·69	453	13·10	613	17·21
Wellington ..	477	11·16	401	9·17	465	10·66	560	12·58
Christchurch..	230	12·68	206	10·62	231	13·11	224	12·24
Dunedin ..	317	13·47	292	12·25	316	12·64	297	11·86

By omitting the deaths of infants under one year, and calculating the rate on the population of one year of age and upwards, the death-rates for the two North Island cities are found to be higher in 1902 than in the previous year, but they are lower at Christchurch and Dunedin in the South Island.

	Deaths per 1,000 of Population, excluding Infants (under One Year of Age).			
	1899.	1900.	1901.	1902.
Auckland (excluding suburbs) ..	9·53	9·72	9·93	12·86
Wellington " ..	8·39	7·65	8·12	9·54
Christchurch " ..	9·16	8·22	10·69	9·03
Dunedin " ..	11·59	10·64	10·88	10·35

Subjoined is a table showing the rates of infant mortality in the four cities for each of the past five years, together with the mean rates for the period.

	Deaths of Children under One Year to every 100 Births.					
	1898.	1899.	1900.	1901.	1902.	Mean of Five Years.
Auckland (excluding suburbs) ..	17·14	14·47	14·49	11·57	14·07	14·35
Wellington " ..	13·71	12·26	6·65	10·43	13·02	11·21
Christchurch " ..	10·00	19·71	11·99	11·35	11·76	12·96
Dunedin " ..	9·66	10·20	8·37	9·07	8·91	9·24

Causes of Death at Four Centres, including Suburbs.

While treating of the death-rates at the chief cities and surroundings, it is desirable to refer to the causes of mortality, which is done in the remarks that follow. The deaths for the whole colony, classified according to their cause, are treated of at length a little further on.

Specific Febrile and Zymotic Diseases (at Four Chief Centres).

The total mortality from these diseases at Auckland and Wellington centres, with their suburbs, was higher in 1902 than in the previous year. The total deaths in this class at the four towns were 209 for 1901, and 356 for 1902.

	Deaths from Febrile and Zymotic Diseases.				
	Auckland and Suburbs.	Wellington and Suburbs.	Christchurch and Suburbs.	Dunedin and Suburbs.	Total.
1902	165	108	48	35	356
1901	70	46	54	39	209

Of the above, diarrhœal diseases caused most deaths in 1902 at the four centres taken together, the total number being 125. Measles came next, with 92 deaths, whooping-cough 38, influenza 29, diphtheria 19, typhoid fever 17, scarlet fever 11, and other zymotic complaints 25.

Comparison of the deaths for each city shows,—

Zymotic, &c., Diseases.	Auckland and Suburbs.		Wellington and Suburbs.		Christchurch and Suburbs.		Dunedin and Suburbs.	
	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.
Diarrhœal diseases	67	31	19	10	31	10	8	6
Influenza	10	14	9	14	3	25	7	21
Typhoid fever	10	11	3	5	2	6	2	2
Measles	40	..	49	..	..	..	3	2
Scarlet fever	1	1	1	..	5	1	4	..
Bubonic plague	3	..	..	..	..	..	..	..
Diphtheria	12	2	..	7	2	2	5	2
Whooping-cough	18	1	17	1	1	1	2	1
Chicken-pox	..	..	..	..	..	1	..	..
Other zymotic diseases	4	10	10	9	4	8	4	5

Parasitic Diseases (at Four Chief Centres).

Hydatids and worms were fatal at Auckland (1 death each).

Dietetic Diseases (at Four Chief Centres).

These numbered 24, 7 being due to want of breast-milk, or malnutrition, 16 to alcoholism and delirium tremens, and 1 to infantile scurvy.

Constitutional Diseases (at Four Chief Centres).

The deaths at the four towns numbered 481 in 1902. The first in importance of these diseases, and of all causes of death, is tubercle. The figures for 1901 and 1902 show 263 and 254 deaths for each year respectively.

Phthisis and other Tubercular Diseases (at Four Chief Centres).

	1902.		1901.	
	Phthisis.	Other Tubercular Diseases.	Phthisis.	Other Tubercular Diseases.
Auckland and suburbs	42	11	41	9
Wellington "	49	19	55	25
Christchurch "	57	12	43	11
Dunedin "	44	20	68	11
	192	62	207	56

The mortality from tubercular diseases for 1902 is 9·78 per cent. of the total deaths at the four boroughs and their suburbs from all causes.

Deaths from cancer rose at the chief towns from 154 in 1901 to 165 in 1902. The latter number is 6·35 per cent. of deaths for the year from all causes.

The number of deaths from cancer at the four chief towns and their suburbs for each of the last five years was as under:—

	1898.	1899.	1900.	1901.	1902.
Auckland and suburbs ..	25	40	32	32	44
Wellington „ ..	43	27	36	38	37
Christchurch „ ..	43	40	32	41	25
Dunedin „ ..	49	44	45	43	59
	160	151	145	154	165

Diabetes shows 26 deaths in 1902, against 24 in 1901.

Developmental Diseases (at Four Chief Centres).

There were 255 deaths in this class, of which 106 were from premature births, 122 from old age, and 27 from other causes.

Local Diseases (at Four Chief Centres).

Deaths in this class were 141 more than in 1901, the figures being 1,266, against 1,125. Diseases of the respiratory system show 337 deaths for 1902, or more than one-fourth of the whole mortality in the class, against 308 in the former year. Bronchitis, pneumonia, congestion of lungs, pleurisy, and allied diseases form this group.

Under the head of "Diseases of the Digestive System" there were 250 deaths at the four centres, including 94 from enteritis, peritonitis 18, gastritis 18, cirrhosis of liver 18, jaundice 9, and dentition 22.

Diseases of the urinary system caused 92 deaths. The remaining deaths were: 267 from nervous diseases, 1 disease of organs of special sense, 262 of organs of the circulatory, 9 of the lymphatic, 31 of the reproductive systems, 13 of the organs of locomotion, and 4 of the integumentary system.

Violent Deaths (at Four Chief Centres).

There were 109 violent deaths, 80 of which were classed as accidental. Three of these latter were caused by fractures, and 8 by falls. In 6 cases deaths resulted from the deceased being run over by a cart, tram, train, &c. Five deaths were from burns or scalds, 18 by drowning, 11 by suffocation, 2 by poisoning, 3 by misadventure with chloroform; besides 7 from accident at birth, and 17 others.

Of 29 suicides, 9 were by shooting, 5 by cutting throat, 7 by poison, 2 by hanging, 3 by drowning, 1 by an explosive, 1 by strangling, and 1 by throwing himself from a window.

Vital Statistics of Australasian Capitals, 1901.

The vital statistics of the chief cities, *with their suburbs*, of Australasia show that the death-rate in Wellington (N.Z.) for 1901 was lower than that of any other of the principal towns for the same year.

Capital Cities (including Suburbs).	Estimated Mean Population.	Births.		Deaths.		Excess of Births over Deaths.
		Total Number.	Rate per 1,000 of Population.	Total Number.	Rate per 1,000 of Population.	
Melbourne ..	498,030	12,375	24·85	7,515	15·09	4,860
Sydney	491,220	12,601	25 65	6,197	12·62	6,404
Adelaide ..	162,195	3,930	24·23	2,130	13·13	1,800
Brisbane* ..	119,428†	3,457	28·95	1,522	12·74	1,935
Perth	37,156	1,304	35·10	622	16·74	682
Hobart ..	34,654	909	26·23	501	14·46	408
Wellington ..	49,344	1,326	26·87	508	10·29	818

* Ten-mile radius. † Census, 1901.

Deaths in the Whole Colony at various Age-periods.

The average age at death of persons of either sex, in each of the eight years 1895–1902, was as follows :—

	Males.	Females.		Males.	Females.
1895 ..	36·21 years	30·17 years.	1899 ..	37·73 years	33·54 years.
1896 ..	36·80 „	32·41 „	1900 ..	40·31 „	36·14 „
1897 ..	38·80 „	34·77 „	1901 ..	41·64 „	37·68 „
1898 ..	39·29 „	35·69 „	1902 ..	41·07 „	34·88 „

The average expectation of life at each year of age has been compiled from a table given in a paper on the rates of mortality in New Zealand which was recently published by Mr. George Leslie, now Registrar of Friendly Societies. This is the best and most up-to-date information procurable, but it is not guaranteed by the authorities of the Government Life Insurance Department.

The table shows, on comparison with New South Wales figures (Coghlan's), that at birth the expectation of life to the male infant in New Zealand is considerably greater than in the State, the figures being 54·44 years (N.Z.), against 49·60 (N.S.W.), and for females 57·26 and 52·90.

At 21 years of age the expectation in New Zealand for males is 43·77 years, against 41·35 (N.S.W.), and for females 45·59, against 43·62.

At age 45 the comparison is, for males, 25·23 years (N.Z.), 23·27 (N.S.W.); females, 27·46 years (N.Z.), against 25·34 (N.S.W.)

At the age of 70, the limit of a normal life, the figures for New Zealand are—males 9·48 years, females 10·23, against 8·64 for both sexes in New South Wales.

Throughout the comparison is in favour of this country.

EXPECTATION OF LIFE IN NEW ZEALAND.

Age.	Average Duration of Life: Years.		Age.	Average Duration of Life: Years.		Age.	Average Duration of Life: Years.	
	Male.	Female.		Male.	Female.		Male.	Female.
0	54·444	57·260	35	32·829	34·954	70	9·481	10·227
1	59·102	61·214	36	32·054	34·215	71	8·988	9 673
2	59·169	61·220	37	31·282	33·475	72	8·504	9·130
3	58·626	60·647	38	30·511	32·734	73	8·035	8·604
4	57·924	59·934	39	29·744	31·990	74	7·586	8·095
5	57·167	59·148	40	28·979	31·243	75	7·160	7·614
6	56·396	58·343	41	28·220	30·493	76	6·758	7·164
7	55·606	57·520	42	27·465	29·739	77	6·379	6·742
8	54·791	56·680	43	26·715	28·981	78	6·022	6·349
9	53·956	55·825	44	25 971	28·221	79	5 683	5·982
10	53·094	54·953	45	25·231	27·458	80	5·362	5·636
11	52 212	54·069	46	24·499	26·694	81	5·055	5·312
12	51·315	53·180	47	23·773	25·927	82	4·765	5·005
13	50·425	52·294	48	23·055	25·163	83	4·489	4·714
14	49·539	51·415	49	22·344	24·399	84	4·229	4·439
15	48·663	50·545	50	21·636	23·640	85	3·982	4·180
16	47·803	49·690	51	20·932	22·885	86	3·747	3·935
17	46·960	48·847	52	20·231	22·135	87	3·525	3·705
18	46·139	48·016	53	19·530	21·392	88	3·313	3·487
19	45·336	47·198	54	18·836	20·655	89	3·110	3·283
20	44·551	46·393	55	18·150	19·926	90	2·914	3·089
21	43·775	45·593	56	17·478	19·202	91	2·723	2·905
22	43·005	44·803	57	16·822	18·485	92	2·525	2·731
23	42·235	44·021	58	16·183	17·776	93	2·323	2·564
24	41·463	43·244	59	15·560	17·077	94	2·101	2·400
25	40·684	42·474	60	14·949	16·386	95	1·843	2·238
26	39·899	41·708	61	14·348	15·705	96	1·553	2·082
27	39·108	40·946	62	13·754	15·037	97	1·247	1·931
28	38·319	40·187	63	13·170	14·386	98	0·960	1·774
29	37·526	39·431	64	12·600	13·752	99	0·677	1·600
30	36·736	38·678	65	12·046	13·135	100	0·500	1·424
31	35·949	37·928	66	11·512	12·534	101	...	1·195
32	35·165	37·181	67	10·994	11·945	102	..	0·889
33	34·384	36·438	68	10·486	11·365	103	...	0·500
34	33·605	35·695	69	9·981	10·792			

Subjoined is a classified statement of the deaths of infants under one year during 1902, with the ratio of the deaths in each class to the 1,000 births during the year:—

Year.	Sex.	Under 1 Month.	1 and under 3 Months.	3 and under 6 Months.	6 and under 12 Months.	Total under 12 Months.
	NUMBER OF DEATHS.					
1902 ..	Male	379	185	169	219	952
	Female	286	159	144	171	760
	DEATHS TO THE 1,000 BIRTHS.					
1902 ..	Male	35·57	17·37	15·86	20·56	89·36
	Female	28·58	15·90	14·40	17·10	75·98

Eighty-nine out of every thousand of male children born, and seventy-six of every thousand females, are found to have died before attaining the age of one year. The mortality is thus one in eleven

of male children and one in thirteen of females, even in New Zealand, where conditions are far more favourable to infant life than in Australia, at least as far as relates to the cities.

It will also be seen from the figures that the chances of living during the first year of age are far greater for female than for male infants. Thus, during the year 1902 there were—

100 deaths of males to		80 deaths of females		under 1 month of age;
100	"	92	"	from 1 to 3 months of age;
100	"	91	"	from 3 to 6 months of age;
100	"	83	"	from 6 to 12 months of age;
100	"	85	"	under 12 months of age.

The rates of infantile mortality—that is, the proportion the deaths of children under one year of age bear to the births—are higher in the Australian States than in New Zealand.

Causes of Death (the Whole Colony).

The deaths registered in the colony during the last five years, when distributed among the several classes according to their assigned causes, give the rates shown hereunder:—

Causes of Death.	Rate per 10,000 living.				
	1898.	1899.	1900.	1901.	1902.
Zymotic diseases	10·99	12·41	9·23	7·83	10·52
Parasitic diseases	0·37	0·38	0·30	0·24	0·10
Dietetic diseases	0·87	1·03	0·93	0·88	0·85
Constitutional diseases	18·81	18·75	17·76	18·83	19·30
Developmental diseases	8·80	9·64	9·15	10·05	10·60
Local diseases	46·86	48·69	45·63	48·95	51·66
Violence	7·43	7·23	7·53	7·48	7·58
Ill-defined and not-specified causes ..	4·26	4·27	3·76	3·87	4·36
All causes	98·39	102·40	94·29	98·13	104·97

The next table shows that forty-nine in every one hundred deaths in 1902 were from local diseases, of which diseases of the respiratory system formed 13 per cent., diseases of the circulatory system 11 per cent., and of the nervous system 10 per cent., while diseases of the digestive system contributed 9 per cent. Constitutional diseases, including, with others, phthisis and cancer, comprised 18 per cent. of the total mortality. Ten per cent. of deaths were from zymotic causes, including 5·77 per cent. from miasmatic diseases, and 3·27 per cent. from diarrhœal. Deaths from developmental diseases caused 10·10 per cent. of the whole, and violent deaths accounted for 7·22 per cent.

Causes of Death.	Number of Deaths.			Proportion to Total Deaths.			Proportion per 10,000 living, 1902.	Proportion per 10,000 living 1901.
	Male.	Female.	Total.	Male.	Female.	Total.		
				Per Cent.	Per Cent.	Per Cent.		
Class I. Specific febrile or zymotic diseases,—								
Order 1. Miasmatic diseases	267	216	483	5·45	6·20	5·77	6·05	5·04
" 2. Diarrhœal diseases	139	136	275	2·85	3·90	3·27	3·45	1·79
" 3. Malarial diseases	2	...	2	0·04	...	0·03	0·03	...
" 4. Zoogenous diseases	...	...	...	...	...	...	...	...
" 5. Venereal diseases	5	10	15	0·11	0·29	0·18	0·19	0·23
" 6. Septic diseases	22	42	64	0·45	1·20	0·77	0·80	0·77
Total Class I.	435	404	839	8·90	11·59	10·02	10·52	7·83
Class II. Parasitic diseases	6	2	8	0·12	0·06	0·10	0·10	0·24
Class III. *Dietetic* diseases	50	18	68	1·02	0·52	0·81	0·85	0·88
Class IV. *Constitutional* diseases	817	723	1,540	16·71	20·74	18·39	19·30	18·83
Class V. Developmental diseases	476	370	846	9·73	10·62	10·10	10·60	10·05
Class VI. Local diseases,—								
Order 1. Diseases of nervous system	523	335	858	10·69	9·61	10·25	10·75	10·54
" 2. Diseases of organs of special sense	2	6	8	0·04	0·17	0·10	0·10	0·04
" 3. Diseases of circulatory system	578	376	954	11·82	10·79	11·39	11·96	12·00
" 4. Diseases of respiratory system	641	417	1,058	13·11	11·96	12·64	13·26	12·61
" 5. Diseases of digestive system	408	326	734	8·34	9·36	8·74	9·20	7·89
" 6. Diseases of lymphatic system	10	18	28	0·20	0·52	0·34	0·35	0·41
" 7. Diseases of urinary system	229	99	328	4·68	2·84	3·92	4·11	3·65
" 8. Diseases of reproductive system,—								
(*a.*) Of organs of generation	1	26	27	0·02	0·74	0·32	0·34	0·35
(*b.*) Of parturition	...	85	85	...	2·44	1·02	1·07	0·89
" 9. Diseases of locomotive system	21	9	30	0·45	0·26	0·36	0·38	0·35
" 10. Diseases of integumentary system	8	3	11	0·16	0·09	0·13	0·14	0·22
Total Class VI.	2,421	1,700	4,121	49·51	48·78	49·21	51·66	48·95
Class VII. Violence,—								
Order 1. Accident or negligence	408	115	523	8·34	3·30	6·24	6·56	6·35
" 2. Homicide	...	2	2	...	0·06	0·02	0·02	0·10
" 3. Suicide	75	5	80	1·54	0·14	0·96	1·00	1·02
" 4. Execution	...	...	...	...	...	...	...	0·01
Total Class VII.	483	122	605	9·88	3·50	7·22	7·58	7·48
Class VIII. Ill-defined and not-specified causes	202	146	348	4·13	4·19	4·15	4·36	3·67
Grand totals	4,890	3,485	8,375	100·00	100·00	100·00	104·97	98·13

The next table shows, for either sex, the number of deaths from each cause registered during the year 1902 :—

CAUSES OF DEATH.

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
I.—Specific Febrile or Zymotic Diseases.	ORDER 1.—*Miasmatic.*			
	Small-pox	...	...	...
	Chicken-pox	...	...	...
	Measles	82	52	134
	Epidemic rose-rash, rubeola	...	...	...
	Scarlet fever, scarlatina	14	25	39
	Typhus	...	...	...
	Bubonic plague	3	...	3
	Dengue	...	...	...
	Relapsing fever	...	...	...
	Influenza	62	55	117
	Whooping-cough	42	41	83
	Mumps	...	...	...
	Diphtheria	29	25	54
	Cerebro-spinal fever	...	...	...
	Simple and ill-defined fever	...	...	...
	Enteric fever, typhoid	35	18	53
	Other miasmatic diseases	...	...	...
	Total Order 1	267	216	483
	ORDER 2.—*Diarrhœal.*			
	Simple cholera	9	8	17
	Diarrhœa	108	109	217
	Dysentery	22	19	41
	Total Order 2	139	136	275
	ORDER 3.—*Malarial.*			
	Remittent fever	...	...	...
	Ague	1	...	1
	Beriberi	1	...	1
	Total Order 3	2	...	2
	ORDER 4.—*Zoogenous.*			
	Hydrophobia	...	...	...
	Glanders	...	...	...
	Splenic fever	...	...	...
	Cow-pox and other effects of vaccination	...	...	...
	Total Order 4	...	...	...
	ORDER 5.—*Venereal.*			
	Syphilis	3	10	13
	Gonorrhœa, stricture of urethra, ulcer of groin	2	...	2
	Total Order 5	5	10	15
	ORDER 6.—*Septic.*			
	Phagedæna	...	...	...
	Erysipelas	8	7	15
	Pyæmia, septicæmia	14	10	24
	Puerperal fever, pyæmia, septicæmia	...	25	25
	Total Order 6	22	42	64
	Total Class I.	435	404	839

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
II.—Parasitic Diseases.	Thrush	1	...	1
	Other diseases from vegetable parasites	...	...	...
	Hydatid disease	4	2	6
	Worms	1	...	1
	Other diseases from animal parasites	...	...	...
	Total Class II.	6	2	8
III.—Dietetic Diseases.	Starvation, exposure	6	...	6
	Want of breast-milk	2	1	3
	Scurvy	1	...	1
	Intemperance—			
	Chronic alcoholism	26	7	33
	Delirium tremens	9	1	10
	Other dietetic diseases	6	9	15
	Total Class III.	50	18	68
IV.—Constitutional Diseases.	Rheumatic fever	21	22	43
	Rheumatism	6	13	19
	Gout	2	..	2
	Rickets	3	2	5
	Cancer	296	240	536
	Tabes mesenterica, tubercular peritonitis	20	25	45
	Tubercular meningitis, acute hydrocephalus	34	32	66
	Phthisis	339	278	617
	Other forms of tuberculosis, scrofula	35	39	74
	Purpura, hæmorrhagic diathesis	4	7	11
	Anæmia, chlorosis, leucocythæmia	25	21	46
	Diabetes mellitus	25	43	68
	Other constitutional diseases	7	1	8
	Total Class IV.	817	723	1,540
V.—Developmental Diseases.	Premature birth	177	126	303
	Atelectasis	14	19	33
	Cyanosis	5	6	11
	Spina bifida	7	9	16
	Imperforate anus	2	...	2
	Cleft palate, hare-lip	1	...	1
	Other congenital defects	8	8	16
	Old age	262	202	464
	Total Class V.	476	370	846
VI.—Local Diseases	ORDER 1.—*Diseases of Nervous System.*			
	Inflammation of the brain or its membranes	72	60	132
	Cerebro-spinal meningitis	5	4	9
	Apoplexy	157	108	265
	Softening of brain	17	6	23
	Hemiplegia, brain paralysis	27	22	49

CAUSES OF DEATH—*continued.*

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 1.—*Diseases of Nervous System*—contd.			
	Paralysis (undescribed)...	56	22	78
	Paralysis agitans ...	3	...	3
	Insanity, general paralysis of insane	32	10	42
	Chorea	1	1	2
	Epilepsy	19	14	33
	Convulsions	61	54	115
	Laryngismus stridulus ...	1	1	2
	Idiopathic tetanus ...	1	1	2
	Paraplegia, diseases of spinal cord	22	8	30
	Locomotor ataxia ...	8	1	9
	Other diseases of nervous system	41	23	64
	Total Order 1 ...	523	335	858
	ORDER 2.—*Diseases of Organs of Special Sense.*			
	Otitis, otorrhœa... ...	2	6	8
	Epistaxis, and diseases of nose	...	...	...
	Ophthalmia, and diseases of eye	...	...	...
	Total Order 2 ...	2	6	8
	ORDER 3.—*Diseases of Circulatory System.*			
	Endocarditis, valvular disease	385	261	646
	Pericarditis	3	4	7
	Hypertrophy of heart ...	...	...	...
	Fatty degeneration of heart	28	25	53
	Angina pectoris... ...	27	9	36
	Syncope	80	48	128
	Aneurism	34	2	36
	Senile gangrene... ...	4	2	6
	Embolism, thrombosis ...	15	22	37
	Phlebitis	...	3	3
	Varicose veins, piles ...	...	...	...
	Other diseases of circulatory system	2	...	2
	Total Order 3 ...	578	376	954
	ORDER 4.—*Diseases of Respiratory System.*			
	Laryngitis	16	10	26
	Croup	11	4	15
	Other diseases of larynx and trachea	...	1	1
	Asthma, emphysema ...	17	3	20
	Bronchitis	203	161	364
	Pneumonia	320	195	515
	Pleurisy...	34	20	54
	Other diseases of respiratory system	40	23	63
	Total Order 4 ...	641	417	1,058

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 5.—*Diseases of Digestive System.*			
	Stomatitis, cancrum oris	3	2	5
	Dentition	25	18	43
	Sore throat, quinsy ...	4	1	5
	Dyspepsia	5	2	7
	Hæmatemesis	6	1	7
	Melæna	5	1	6
	Diseases of stomach, gastritis	49	60	109
	Enteritis	124	108	232
	Ulceration, perforation, of intestine	10	6	16
	Ileus, obstruction of intestine	35	16	51
	Stricture or strangulation of intestine	1	1	2
	Intussusception of intestine	6	1	7
	Hernia	5	10	15
	Fistula	1	1	2
	Peritonitis	38	36	74
	Ascites	...	1	1
	Gall-stones	3	6	9
	Cirrhosis of liver ...	28	15	43
	Other diseases of liver, hepatitis, jaundice ..		23	52
	Other diseases of digestive system. ...	31	17	48
	Total Order 5 ...	408	326	734
	ORDER 6.—*Diseases of Lymphatic System and Ductless Glands.*			
	Diseases of lymphatic system	5	2	7
	Diseases of spleen ...	2	...	2
	Bronchocele	...	11	11
	Addison's disease ...	3	5	8
	Total Order 6 ...	10	18	28
	ORDER 7.—*Diseases of Urinary System.*			
	Acute nephritis	30	16	46
	Bright's disease .	107	56	163
	Uræmia	14	3	17
	Suppression of urine ...	3	...	3
	Calculus	2	2	4
	Hæmaturia	3	..	3
	Diseases of bladder and prostate	61	10	71
	Other diseases of urinary system (kidney diseases undescribed)	9	12	21
	Total Order 7 ...	229	90	328
	ORDER 8.—*Diseases of Reproductive System.*			
	(*a.*) Diseases of organs of generation,—			
	Ovarian disease ...	...	6	6

CAUSES OF DEATH—*continued.*

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 8.—*Diseases of Reproductive System*—ctd.			
	(*a.*) Diseases of organs of generation—*ctd.*			
	Diseases of uterus and vagina	...	18	18
	Disorders of menstruation	...	2	2
	Pelvic abscess	...	...	...
	Perineal abscess ...	1	...	1
	Diseases of testes, penis, scrotum, &c.	...	...	...
	(*b.*) Diseases of parturition,—			
	Abortion, miscarriage ...	...	16	16
	Puerperal mania ...	...	...	...
	Puerperal metritis ...	...	...	..
	Puerperal convulsions ...	...	11	11
	Placenta prævia (flooding)	...	18	18
	Phlegmasia dolens ...	...	...	..
	Other accidents of childbirth	...	40	40
	Total Order 8 ...	1	111	112
	ORDER 9.—*Diseases of Organs of Locomotion.*			
	Caries, necrosis	10	3	13
	Arthritis, ostitis ...	4	2	6
	Other diseases of organs of locomotion	7	4	11
	Total Order 9 ...	21	9	30
	ORDER 10.—*Diseases of Integumentary System.*			
	Carbuncle	...	...	..
	Phlegmon, cellulitis ...	3	1	4
	Lupus	...	...	...
	Ulcer, bed-sore	1	...	1
	Eczema	3	...	3
	Pemphigus	1	1	2
	Other diseases of integumentary system ...	...	1	1
	Total Order 10 ...	8	3	11
	Total Class VI. ...	2,421	1,700	4,121

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VII.—VIOLENCE.	ORDER 1.—*Accident or Negligence.*			
	Fractures, contusions ...	185	24	209
	Gunshot wounds ...	14	4	18
	Cut, stab	13	3	16
	Burn, scald	18	30	48
	Sunstroke	2	...	2
	Poison	8	10	18
	Drowning	125	21	146
	Suffocation	18	12	30
	Otherwise	25	11	36
	Total Order 1 ...	404	115	523
	ORDER 2.—*Homicide.*			
	Murder, manslaughter ...	...	2	2
	Wounds in battle ...	...	...	...
	Total Order 2 ...	...	2	2
	ORDER 3.—*Suicide.*			
	Gunshot wounds ...	21	...	21
	Cut, stab	15	1	16
	Poison	13	1	14
	Drowning	9	3	12
	Hanging	10	...	10
	Otherwise	7	...	7
	Total Order 3 ...	75	5	80
	ORDER 4.—*Execution.*			
	Hanging	...	...	...
	Total Class VII. ...	483	122	605
VIII.—ILL-DEFINED AND NOT-SPECIFIED CAUSES.	Dropsy	...	...	...
	Marasmus, &c.	180	143	323
	Mortification, gangrene ...	...	...	...
	Tumour	5	1	6
	Abscess	3	...	3
	Hæmorrhage	...	...	...
	Sudden (cause unascertained)	14	2	16
	Other ill-defined and not-specified causes ...	...	...	...
	Total Class VIII. ...	202	146	348
	General totals ...	4,890	3,485	8,375

MORTALITY FROM FEBRILE AND ZYMOTIC DISEASES.

The deaths in 1902 from specific febrile or zymotic diseases amounted to 839, a proportion of 10·52 in every 10,000 persons living, an increase of 230 on the number of deaths in 1901, when the proportion was 7·83. A heavier mortality from measles, scarlet fever, diphtheria, whooping-cough, and diarrhœal diseases were the main causes of the increased death-rate in this class.

The following are the diseases in this class that have caused the greatest mortality during the past ten years:—

Diseases.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Measles	525	14	..	1	1	56	137	9	6	134
Scarlet fever and scarlatina	1	5	..	4	2	2	..	10	17	39
Diphtheria ..	128	92	76	74	49	45	58	63	44	54
Whooping-cough ..	55	190	150	24	2	6	123	90	9	83
Influenza ..	106	233	125	89	120	219	135	181	219	117
Diarrhœal diseases	193	207	232	334	257	275	298	199	139	275
Enteric or typhoid fever	97	115	94	124	106	120	93	68	95	53
Puerperal fever ..	24	38	32	10	18	19	15	24	20	25

Measles, which was epidemic in 1893, caused only 16 deaths in the four succeeding years; but in 1898 the mortality rose to 56 and in 1899 to 137 deaths, falling again to 9 deaths in 1900 and to 6 deaths in 1901, again rising to 134 in 1902. From scarlet fever and scarlatina there were 39 deaths last year. The mortality from diphtheria rose from 45 deaths in 1898 to 58 in 1899 and 63 in 1900, fell to 44 deaths in 1901, and rose again to 54 in 1902.

Whooping-cough in 1894 destroyed 190 lives, and 150 in 1895, but was in 1896, 1897, and 1898 much less fatal. In 1899 the mortality sprang up again to a total of 123 deaths, against 90 in 1900, 9 in 1901, and 83 in 1902. In 1891 there were 242 deaths from this cause.

Influenza, the deaths from which were 89 in 1896, 120 in 1897, and 219 in 1898, caused 135 deaths in 1899, 181 in 1900, 219 in 1901, and 117 in 1902.

From diarrhœal complaints the deaths in 1902 were 275, against 139 in 1901; while in 1896 the mortality reached the height of 334 deaths, and in 1889 was even higher (355), with a much smaller population than in 1902. Diarrhœal diseases were the most fatal of the order "febrile and zymotic" (275 deaths), measles coming second, for the year 1902, influenza third, and whooping-cough fourth.

Enteric or typhoid fever was not so fatal in 1902 as in 1901, the figures being 53 deaths, against 95 for the former year. The highest mortality during the decennium was in 1896, when the deaths numbered 124 for the colony.

Bubonic-plague Prevention.

The year 1900 saw the outbreak of the disease known as the bubonic plague, in Sydney and other parts of Australia. In that year there was one death from plague in New Zealand, which occurred at Auckland. None happened in the year 1901, but three deaths from this cause, all males, were registered at Auckland during 1902. The Public Health Department is taking every possible precaution.

Vaccination.

From small-pox there were no deaths in 1902. The vaccinations registered for the last ten years are as under :—

Year.	Total Vaccinations registered.	Number of Births registered.	Proportion of Successful Vaccinations of	
			Children under 1 Year of Age to Total Births. Per Cent.	Children under 14 Years of Age to Total Births. Per Cent.
1902 ..	8,763	20,655	12·64	42·43
1901 ..	3,768	20,491	9·68	18·39
1900 ..	4,525	19,546	16·12	23·15
1899 ..	5,133	18,835	17·94	27·25
1898 ..	10,349	18,955	29·05	54·60
1897 ..	12,440	18,733	32·89	66·41
1896 ..	11,917	18,612	30·78	64·03
1895 ..	8,523	18,546	31·72	44·34
1894 ..	9,322	18,528	32·42	50·31
1893 ..	7,412	18,187	28·09	40·75

The number of successful vaccinations registered in 1902 was 8,763, against 3,768 in 1901, 4,525 in 1900, 5,133 in 1899, and 10,349 in 1898. The fall prior to 1902 was consequent on the alteration of the law relative to vaccination in England, and subsequently in this colony.

One child in every eight born in 1902 is shown to have been successfully vaccinated in that year. The procedure under the new law as regards vaccination is similar to that previously in force. The Registrar issues a notice when a birth is registered, with forms for certificate as to the result of vaccination attached. Vaccination is still compulsory, if exemption is not secured in four months from date of birth. But everything is now subject to the provisions of the "exemption clause," which is the main feature, and governs the rest. Any parent or custodian who has conscientious objections—believing that vaccination would be injurious to the child's health—can apply for a certificate of exemption to a Magistrate or Registrar of Births; and, when the child's parent or guardian is resident outside of a borough, the application may be made to and certificate granted by a Justice of the Peace.

Four thousand three hundred and twenty-seven exemption certificates were issued from the 13th October, 1900, when the Act came into force, to the end of the year 1902.

When no exemption certificate is obtained, the law now allows to the parent *twelve months* instead of *six* from date of birth in which to vaccinate, and a similar period from date of taking charge of child in case of a custodian. There are penalties for not vaccinating, as before. One conviction for neglecting to vaccinate a child removes liability until the child is four years of age.

The main features of the new English law include a system of domiciliary visitation by public vaccinators, in substitution for that requiring children to be taken to vaccination stations, and exemption of parents and others from any penalty for not vaccinating children on production to the proper officer of a Magistrate's certificate to the effect that he is satisfied as to the conscientious objections raised. Vaccination with glycerinated calf-lymph or other lymph issued by Local Government Boards is offered by the Government. The Act continues in force until the beginning of the year 1904.

Parasitic Diseases.

There were 8 deaths from parasitic diseases, the proportion per 10,000 living being 0·10. Deaths from hydatids numbered 6 in 1902.

Dietetic Diseases.

Under the class "Dietetic diseases" are included 43 deaths from intemperance. But these cannot be said to represent the full extent of the mortality really caused by the abuse of alcoholic liquors. Many deaths of intemperate persons are attributed to disease of the liver, kidneys, &c., in the medical certificates.

Constitutional Diseases: Phthisis, Cancer, etc.

The deaths from constitutional diseases in 1902 numbered 1,540, or 19·30 per 10,000 of population, and 18 out of every 100 deaths from all causes. This class of disease is more fatal than any other except that defined as "Local diseases," on account of the great numbers of deaths from cancer and phthisis, with other tubercular complaints, which are classed as "Constitutional."

From phthisis there are more deaths than from any other cause. The number of deaths was 617 in 1902. The deaths in 1902 were in the proportion of 7·73 in every 10,000 persons living, against 7·66 in the previous year.

Figures for ten years are quoted, showing that the total number of deaths from this disease in 1902 was the highest recorded during the decennium, though the rate had been higher in some of the previous years.

Year.	Deaths from Phthisis.	Rate per 10,000.
1893	545	8·24
1894	576	8·48
1895	553	7·99
1896	523	7·40
1897	596	8·26
1898	597	8·11
1899	593	7·91
1900	577	7·56
1901	596	7·66
1902	617	7·73

In Australasia the rate is materially increased by the deaths of persons who have come out either already suffering from phthisis or predisposed thereto. There is no reason for believing that this circumstance has more effect on the death-rate in Australia than in New Zealand; so that the lower rate referred to in previous issues of this work as obtaining in this colony may be taken as proof of the superiority of its climate for withstanding consumptive tendencies.

The death-rate of England and Wales from phthisis, though declining, is far higher than that of New Zealand. In 1900 it stood at 13·32 per 10,000.

Phthisis is now known to be and is treated as an infectious preventible disease caused by the bacillus tuberculosis, which is communicable in many ways. Certain constitutions are far more predisposed than others to receive this bacillus, especially under conditions of life unfavourable to robust health, when a nidus is formed for the development of the bacillus. The Government has established a sanatorium for consumptives at Hamilton in the Waikato, and further institutions are contemplated.

From other forms of tuberculosis the deaths in 1902 were 185, or 2·32 per 10,000 of population. Thus a large addition has to be made to the deaths from phthisis to appreciate the full mischief done by tubercular disease.

Deaths from all Tubercular Diseases.

The mortality from all forms of tubercular disease, taken together, has been at the average rate of about 10½ persons per 10,000 living for the last ten years. This rate is far lower than that which obtained in England during the year 1900, when the proportion was 19·00 per 10,000 living.

A table is supplied showing the results for each of ten years in New Zealand. Besides the death-rate from tubercular diseases, it also shows the percentage of deaths by tubercle to those from all causes, which was from 9½ to 11½ per cent. for the decennial period 1893–1902.

DECENNIAL TABLE, 1893–1902, SHOWING THE DEATH-RATE FROM TUBERCLE PER 10,000 LIVING AND PERCENTAGE OF TOTAL DEATHS.

Year.	Mean Population.	Number of Deaths from Tubercular Diseases.	Rate per 10,000.	Percentage of Total Deaths from All Causes.
1893	661,349	729	11·02	10·77
1894	679,196	752	11·07	10·87
1895	692,417	761	10·99	11·09
1896	706,846	680	9·62	10·57
1897	721,609	763	10·57	11·57
1898	736,260	769	10·44	10·62
1899	749,984	795	10·60	10·35
1900	763,594	752	9·85	10·44
1901	777,968	775	9·96	10·15
1902	797,793	802	10·05	9·58

DECENNIAL TABLE, 1893–1902. — Deaths from various Tubercular Diseases registered in New Zealand, specifying the Number under and over Five Years of Age.

Persons.

Year.	Tabes Mesenterica, Tubercular Peritonitis.		Tubercular Meningitis, Acute Hydrocephalus		Phthisis.		Other Forms of Tuberculosis, Scrofula.		Total Deaths from Tuberculosis.		Total All Ages.
	Under 5 Years.	Over 5 Years.	Under 5 Years.	Over 5 Years.	Under 5 Years.	Over 5 Years	Under 5 Years.	Over 5 Years.	Under 5 Years.	Over 5 Years.	
1893 ..	35	14	33	39	8	537	21	42	97	632	729
1894 ..	36	13	33	30	7	569	16	48	92	660	752
1895 ..	47	15	25	37	5	548	28	56	105	656	761
1896 ..	36	11	30	28	5	518	19	33	90	590	680
1897 ..	35	9	33	32	7	589	13	45	88	675	763
1898 ..	37	12	37	38	10	587	11	37	95	674	769
1899 ..	43	19	32	40	10	583	12	56	97	698	795
1900 ..	20	20	24	55	13	564	9	47	66	686	752
1901 ..	30	22	30	31	10	586	14	52	84	691	775
1902 ..	26	19	36	30	5	612	8	66	75	727	802

Eight deaths from "lupus" recorded during the decennium have not been included in the above table. They were all deaths of adult persons (4 males and 4 females).

It will be seen that the term "tubercular diseases" includes "phthisis," "tabes mesenterica," "tubercular peritonitis," "tubercular meningitis," "acute hydrocephalus," with other forms of tuberculosis (scrofula, &c.). Of these the mortality from phthisis forms by far the greatest part of the whole. Thus, in 1902 there were 617 deaths from phthisis out of a total of 802 deaths from all tubercular complaints. Of 617 deaths by phthisis, only 5 were of persons under 5 years of age.

Examination of the next table, giving the full series of ages of persons who died from tubercular disease during the year 1902, shows that of 45 deaths from tabes mesenterica, with tubercular peritonitis, 26 were of children under 5 years. Also that, of 66 deaths from tubercular meningitis, with acute hydrocephalus, 36 were of persons under 5 years, and 20 from 5 to 20 years. Under "other forms of tuberculosis" (excepting phthisis) the greater numbers of deaths are at ages under 25 years.

The mortality from phthisis is heaviest at 20–30 years, being 227 deaths out of 617 of all ages; but large numbers are found in the columns as far as that for the advanced term of 65 to 70 years, at which the deaths for 1902 were 20, and 10 deaths from this cause are of persons of 70 years and upwards.

TABLE showing the Number of Deaths from Tubercular Diseases registered in New Zealand during the Year 1902, arranged in Groups of Ages.

Persons.

—	Under 1 Year.	Under 5 Years.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and upwards.	Total, 5 Years and over.	All Ages.
Tabes Mesenterica, Tubercular Peritonitis	23	26	...	2	...	5	7	1	1	..	...	2	...	...	1	...	...	...	19	45
Tubercular Meningitis, Acute Hydrocephalus	9	36	10	4	6	8	...	2	...	...	...	...	...	...	...	...	...	...	30	66
Phthisis	2	5	2	8	64	102	125	77	70	43	30	25	17	19	20	8	1	1	612	617
Other forms of Tuberculosis, Scrofula	3	8	2	10	9	12	14	7	2	1	1	3	...	2	2	1	...	...	66	74
Totals ...	37	75	14	24	79	127	146	87	73	44	31	30	17	21	23	9	1	1	727	802

To show the mortality from tuberculosis in various parts of the colony, a table giving the deaths in the various provincial districts is added, which, however, only shows that the mortality is distributed very much according to population. The deaths in the North Island are, however, found to be 46 fewer than those for the South Island, or 378 deaths and 424 deaths for those divisions respectively:—

TABLE showing the Number of Deaths from Tubercular Disease registered in each Provincial District of New Zealand during the Year 1902.

Provincial District.	Tabes Mesenterica, Tubercular Peritonitis.	Tubercular Meningitis, Acute Hydrocephalus.	Phthisis.	Other Forms of Tuberculosis, Scrofula.	Total Deaths from Tuberculosis.
Auckland ..	11	13	146	11	181
Taranaki ..	2	1	11	3	17
Hawke's Bay	1	3	27	1	32
Wellington ..	8	18	107	15	148
Marlborough	1	1	5	1	8
Nelson ..	2	4	29	5	40
Westland ..	..	1	10	..	11
Canterbury ..	10	6	128	17	161
Otago ..	10	19	154	21	204
Totals ..	45	66	617	74	802

Legislative action has been recommended to safeguard the life and health of the people from tubercle; and the complete isolation of consumptive patients, with the disinfecting of their sputa and of everything that has been in contact with them, is suggested from time to time as a necessary measure.

Cancer.

The deaths from cancer during the year 1902 were 536. There were more deaths of males than of females, the numbers being—males 296, females, 240. The rate of mortality per 10,000 living was 6·72. The apparent increase in deaths from this disease is shown further on and compared with that of England. But the increase is not believed by all authorities to be a fact to the extent represented, but partly the result of more careful certification of the causes of death, and of improved diagnosis in cases of what is termed inaccessible cancer.

It is certain, however, that out of a total of 8,375 deaths from all causes in New Zealand during 1902, 536, or 6·40 per cent., were caused by cancer.

The death-rate from cancer is not so great as that from tubercular diseases, but is nevertheless a most alarming matter, not only on account of the number of deaths, but because of its progressive increase.

A decennial table shows that the deaths per 10,000 persons living rose from 5·02 in 1892 to 6·72 in 1902; and that whereas 4·91 out of every 100 deaths were attributable to cancer ten years ago, the proportion had grown to 6·40 last year.

TABLE showing for each of the Ten Years 1893 to 1902 the Number of Persons registered as having died from Cancer, the Proportion of Deaths from Cancer per 10,000 living, and the Percentage of all Deaths attributed to Cancer.

Year.	Estimated Mean Population.	Deaths from Cancer.	Total Deaths, all Causes.	Deaths from Cancer per 10,000.	Percentage of Total Deaths due to Cancer.
1893 ..	661,349	332	6,767	5·02	4·91
1894 ..	679,196	408	6,918	6·01	5·90
1895 ..	692,417	383	6,863	5·53	5·58
1896 ..	706,846	389	6,432	5·50	6·05
1897 ..	721,609	395	6,595	5·47	5·99
1898 ..	736,260	471	7,244	6·40	6·50
1899 ..	749,984	468	7,680	6·24	6·09
1900 ..	763,594	430	7,200	5·63	5·97
1901 ..	777,968	515	7,634	6·62	6·75
1902 ..	797,793	536	8,375	6·72	6·40

To exhibit how cancer affects the different parts of the human body in respect of each sex, the experience of four years (1899, 1900, 1901, and 1902) is shown in a succeeding table. Of any single organ affected, the stomach is the one most liable to be the seat of cancer among males, although with this sex the disease is apparently to about the same extent located in the mouth, lips, tongue, and throat, taking these parts all together. Next to the stomach, the liver is with males the part which is most often attacked, to judge by mortality records, and next in order come the intestines and rectum. Afterwards, but at a considerable distance, follow the kidneys, bladder, and urethra.

Amongst the females, the organs of generation, ovaries, uterus, and vagina, as a group, show by far most cases of mortality from cancer; but, as with the males, the stomach is, of any single organ, the one most affected, the liver coming next, then the breast, and then the intestines and rectum. Females do not contract cancer in the mouth (judging by the returns of deaths), tongue, lips, and throat to nearly the same extent as prevails among males. Whatever may be the cause, the figures are remarkable, being only 6 out of every 100 deaths from cancer among females, against 27 out of every 100 of males dying from the same cause; or, expressed in numbers, 45 deaths of females occurred against 256 of males from cancer in the mouth, &c., in a four years' experience of mortality.

DEATHS FROM CANCER, 1899, 1900, 1901, AND 1902.

TABLE showing the Number of Deaths of Males and Females from Cancer during the Years 1899, 1900, 1901, and 1902, classified according to the Part of the Body affected.

Part affected.	1899.		1900.		1901.		1902.	
	Number of Deaths.	Proportion of Specified.	Number of Deaths.	Proportion of Specified.	Number of Deaths.	Proportion of Specified.	Number of Deaths.	Proportion of Specified.
Males.								
		Per Cent.		Per Cent.		Per Cent.		Per Cent.
Mouth, lip, tongue, throat, neck, &c.	65	27·43	68	31·78	60	24·69	63	24·14
Stomach	87	36·71	80	37·38	97	39·92	112	42·91
Intestines, rectum	20	8·44	26	12·15	32	13·17	32	12·26
Liver	40	16·88	25	11·68	37	15·23	38	14·56
Kidneys, bladder, urethra, &c.	17	7·17	9	4·21	13	5·35	12	4·60
Leg, foot, &c.	6	2·53	4	1·87	..	..	..	..
Lung	2	0·84	2	0·93	4	1·64	4	1·53
	237	100·00	214	100·00	243	100·00	261	100·00
Not specified	34	..	32	..	22	..	35	..
Totals	271	..	246	..	265	..	296	..
Females.								
Mouth, tongue, throat, &c.	17	9·71	6	3·73	6	2·77	16	7·44
Breast	20	11·43	17	10·56	38	17·51	33	15·35
Stomach	40	22·86	28	17·39	61	28·11	43	20·00
Intestines, rectum	14	8·00	21	13·04	19	8·76	33	15·35
Kidneys, bladder	4	2·29	5	3·11	2	0·92	8	3·72
Ovary, uterus, vagina	50	28·57	54	33·54	55	25·35	44	20·46
Liver	25	14·29	25	15·53	29	13·36	33	15·35
Gall-bladder, spleen, pancreas	3	1·71	2	1·24	2	0·92	3	1·40
Lung, spine, thigh, shoulder	2	1·14	3	1·86	5	2·30	2	0·93
	175	100·00	161	100·00	217	100·00	215	100·00
Not specified	22	..	23	..	33	..	25	..
Totals	197	..	184	..	250	..	240	..

Considering the numbers of persons dying at the different age-periods, the following table of ten years' results shows the age of 30 years to be the time of life at which deaths from cancer begin to be numerous (it is really 35 for males and 30 for females). The maximum of deaths is reached at the period 60 to 65 for males, and 55 to 60 for females. These remarks are given without reference to the numbers of persons living at the various ages.

Deaths from cancer, it will be observed, are very rare among children under 5 years, and not frequent in those above that age.

Deaths from Cancer.—Decennial Return.

Table showing the Number of Persons (Males and Females) at Different Ages registered as having died from Cancer in New Zealand during the Ten Years 1893 to 1902.

Year.	Under 1 Year.				Total under 1 Year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	Total under 5 Years.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and upwards.	Total 5 Years and over	All Ages.
	Under 1 Month.	1 to 3 Months.	3 to 6 Months.	6 to 12 Months.																								
1893 ...	...	...	...	...	...	...	...	2	1	3	1	3	...	3	1	6	9	22	32	61	54	57	36	25	13	6	329	332
1894 ...	...	...	...	...	...	...	...	1	...	1	1	...	3	1	5	11	15	27	41	64	73	71	38	26	24	7	407	408
1895 ...	...	...	...	...	...	...	...	...	...	...	2	...	..	3	1	6	11	25	47	61	64	63	38	37	19	6	383	383
1896 ...	...	...	...	...	...	...	...	...	2	2	2	1	1	2	5	6	14	21	36	59	74	67	49	29	14	7	387	389
1897 ...	...	1	...	...	1	...	1	...	1	3	...	2	1	1	...	7	10	22	41	42	71	74	49	35	29	8	392	395
1898 ...	...	...	...	...	...	...	...	2	...	2	1	2	2	5	5	8	17	36	47	47	77	79	69	35	30	9	469	471
1899 ...	...	...	...	...	...	...	...	1	...	1	3	3	...	1	4	6	15	21	42	48	82	64	87	45	27	19	467	468
1900 ...	...	1	...	...	1	...	...	1	...	2	...	...	6	2	2	6	7	16	40	35	75	78	59	51	31	20	428	430
1901 ...	...	...	1	...	1	...	...	...	...	1	2	...	4	5	5	8	20	31	53	60	65	80	74	63	33	11	514	515
1902 ...	...	...	...	...	...	...	...	...	...	...	1	...	3	5	5	7	22	35	49	50	72	88	86	67	31	15	536	536

The numbers of deaths of persons from cancer in each provincial district are given in another table, according to age-groups, but the result merely shows the disease to be one found everywhere throughout the colony—at least, there is no sufficient evidence of climatic conditions affecting the mortality to a great extent in any particular part of the country.

Table showing the Number of Deaths from Cancer registered in each Provincial District of the Colony of New Zealand during the Years 1899-1902.

Provincial Districts.	1899.			1900.			1901.			1902.		
	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.
Auckland	...	89	89	1	107	108	1	91	92	...	115	115
Taranaki	...	25	25	...	9	9	...	24	24	...	24	24
Hawke's Bay	...	26	26	...	15	15	...	16	16	...	15	15
Wellington	...	70	70	...	79	79	...	83	83	...	95	95
Marlborough	...	6	6	...	11	11	...	7	7	...	7	7
Nelson	...	26	26	...	19	19	...	34	34	...	33	33
Westland	...	12	12	...	11	11	...	26	26	...	19	19
Canterbury	...	96	96	...	74	74	...	98	98	...	98	98
Otago	1	117	118	1	103	104	...	135	135	...	130	130
Totals	1	467	468	2	428	430	1	514	515	...	536	536

The increase since 1881 is well exhibited in respect of each sex, and in regard to the higher ages, which are the periods at which the most cancer deaths occur, by a proportional statement:—

PROPORTIONS OF DEATHS FROM CANCER PER 10,000 MALES AND FEMALES LIVING AT THREE AGE-PERIODS.

Year.	40 to 50.		50 to 60.		60 to 70.	
	Males.	Females.	Males.	Females.	Males.	Females.
1881 ..	5·58	9·80	11·10	22·57	22·86	43·78
1898 ..	9·07	16·59	21·64	26·09	55·21	47·44
1902 ..	11·86	10·53	18·90	28·73	46·18	44·12

The death-rates for cancer in respect of each sex are given for each of seven years, selected to show the position as from 1886 to 1902:—

DEATHS FROM CANCER IN EVERY 10,000 PERSONS OF EACH SEX LIVING IN NEW ZEALAND.

Year.	Males.	Females.	Year.	Males.	Females.
1886	3·69	3·67	1899	6·85	5·56
1890	4·72	4·79	1900	6·12	5·09
1894	6·65	5·27	1901	6·48	6·77
1898	6·77	5·98	1902	7·05	6 35

The mortality was higher among the males than among the females (with the exception of 1901), which is the reverse of English experience, where the rate was 6·72 per 10,000 of males and 9·75 of females for the year 1900. In the United Kingdom, however, the rate of increase is so much higher among males than with females that the Registrar-General calculates equilibrium will be reached in about the year 1932, and thereafter the rate among males would exceed the rate among females.

The increase in the numbers for the sexes together for England and New Zealand is represented in the proportions below:—

DEATHS FROM CANCER IN EVERY 10,000 PERSONS LIVING.

Year.	New Zealand.	England.	Year.	New Zealand.	England.
1881	2·69	5·20	1896	5·50	7·64
1886	3·68	5·90	1899	6·24	8·29
1891	4·68	6·92	1902	5·63	8·28

The actual number of deaths of persons of either sex and all ages registered in New Zealand during the last twelve years was:—

	Males.	Females.	Totals.
1891	154	141	295
1892	173	134	307
1893	188	144	332
1894	240	168	408
1895	208	175	383
1896	205	184	389
1897	210	185	395
1898	263	208	471
1899	271	197	468
1900	246	184	430
1901	265	250	515
1902	296	240	536
Totals ..	2,719	2,210	4,929

Mortality from Developmental Diseases.

The total of deaths from developmental diseases was 846, or 10·60 per 10,000 persons living. The mortality from premature birth comprised 303 deaths, and that from atelectasis, cyanosis, and other congenital defects 79 deaths. The proportion of deaths from premature birth varies from 11 to 15 out of every 1,000 births, and that from congenital defects from 2 to 4 per 1,000 births. Particulars for seven years exhibit the annual rates:—

Number and Proportions per 1,000 Births.

Year.	Deaths from Premature Birth. No.	Deaths from Premature Birth. Proportion per 1,000.	Deaths from Congenital Defects. No.	Deaths from Congenital Defects. Proportion per 1,000.
1896	230	12·36	46	2·47
1897	211	11·26	52	2·78
1898	251	13·24	54	2·85
1899	261	13·86	47	2·50
1900	276	14·12	55	2·81
1901	264	12·88	63	3·07
1902	303	14·66	79	3·82

Stating the result in another way, there was one death from premature birth to every 68 births in 1902, and one death from congenital defect to every 261 births. In England the proportion of deaths from premature birth to every 1,000 births was as high as 19·93 in the year 1900.

Old Age.

Deaths from old age in 1902 numbered 464, against 455 in 1901.

Mortality from Local Diseases.

Deaths by diseases of the nervous system were 858, or 10·25 out of every 100 deaths from all causes, and 10·75 out of every 10,000 persons living. Of the 858 deaths, 265 were credited to apoplexy, 115 to convulsions, and 132 to inflammation of the brain and its membranes. Paralysis, including hemiplegia and paralysis of the insane, caused 169 deaths, and locomotor ataxia 9 deaths. Paraplegia, with diseases of the spinal cord, caused 30. Deaths from nervous diseases (excluding convulsions of children) numbered 747, or 9·36 per 10,000 persons living.

Diseases of the circulatory system resulted in 954 deaths, being 11·39 out of every 100 from all causes, and 11·96 per 10,000 persons living. Of the total number in this order, endocarditis and valvular disease of the heart contributed 646 deaths. From angina pectoris there were 36 deaths, from syncope 128, from aneurism 36, and from other forms of heart-disease (hypertrophy, fatty degeneration, and pericarditis) 97.

Diseases of the respiratory system show 1,058 deaths, of which 879 were attributable to bronchitis and pneumonia. Taken together, these two complaints were the cause of more deaths than was phthisis; and adding 54 from pleurisy, 15 from croup, 26 from laryngitis, and 84 from other respiratory diseases, the mortality in the order is found to be 12·64 per cent. of the total deaths, and 13·26 per 10,000 of the population.

Deaths from diseases of the digestive system also formed a large proportion of the whole (8·74 per cent.), the number being 734. Enteritis was most fatal, showing 232 deaths, gastritis (109) and liver-diseases (95) coming next.

Of 328 deaths from diseases of the urinary system in 1902, the deaths from Bright's disease of the kidneys (albuminuria) numbered 163.

Violent Deaths.

Deaths by violence form a large item in the total mortality. In 1902 the proportion per 10,000 of persons living was 7·58, the total number of deaths having been 605.

Of 483 males who died violent deaths, 75 were suicides. The deaths of females by violence were far fewer than those of males, amounting to 122, and out of these only 5 committed suicide. A table given previously states the full list of deaths from external or violent causes for the year 1902.

Accidental deaths numbered 523—males 408 and females 115. Of the total male deaths, 185 resulted from fractures or contusions, and 125 from drowning. Of the female deaths, 21 were due to drowning.

Hospitals, Lunatic Asylums, Benevolent Asylums, and Charitable Institutions.

Hospitals.

Prior to the abolition of provinces the hospitals of the colony were supported mainly out of provincial revenues. After that event the expenditure for hospitals was for the most part charged against the revenue of counties and municipal corporations, until October, 1885, when "The Hospitals and Charitable Institutions Act, 1885," came into force.

The portion of the colony included within the three principal islands—the North, Middle, and Stewart Islands—is by the above Act divided into thirty hospital districts, each consisting of one or more counties with the interior boroughs, to be presided over by elective Boards, designated "Hospital and Charitable Aid Boards."

The revenues of these Boards accrue from the following sources:—

(1.) Rents and profits of land and endowments vested in the Board, or set apart for the benefit of particular institutions;
(2.) Voluntary contributions;
(3.) Grants from contributory local authorities; and
(4.) Subsidies from the Consolidated Fund (these being at the rate of 10s. for every £1 of bequests, but in no case exceeding £500 in respect of any one bequest; £1 4s. for every £1 of voluntary contributions; and £1 for every £1 received from any local authority).

The contributory local authorities (being the County and Borough Councils, and Boards of road and town districts where the Counties Act is not in force) are empowered by the Act to raise by special rates the amounts assessed by the Hospital District Boards as their proportionate contributions to the Hospital and Charitable Aid Fund.

The District Boards undertake the general management and control of those hospitals that are not incorporated in terms of the Act, and are required to contribute to the support of the incorporated hospitals. To be incorporated a hospital must have as many as 100 subscribers contributing not less than £100 annually by amounts of not less than 5s., and must have been declared by the Governor in Council, after receipt by him of a duly signed petition, to be a body politic and corporate, under the government of trustees.

There are 45 hospitals in the colony, of which 23 are incorporated institutions, while 22 are directly managed and controlled by District Boards. In 1902 these hospitals afforded accommodation for 1,139 male and 677 female patients, a total of 1,816. The number of cubic feet of space included within the walls of all the sleeping-wards was 2,575,532, which gave an average of 1,363 cubic feet to each bed. 9,042 males and 4,504 females were admitted as patients during the year 1902, and 779 male and 364 female patients were inmates at the end of the year. The total number of indoor patients during the year was 14,659—viz., 9,825 males and 4,834 females.

Outdoor relief was also given to a very large number of persons; but, as in some of the hospitals no records are kept of the outdoor patients, it is impossible to state the number of distinct persons who received such relief.

The total revenues of the various hospitals as at five different annual periods were :—

—	1897-98.	1898-99.	1899-1900.	1900-1901.	1901-1902.
	£	£	£	£	£
Voluntary contributions and bequests	11,521	11,991	9,188	7,330	11,154
Payments by patients	12,728	13,066	16,503	15,998	18,083
From Government	38,687	41,052	44,815	47,074	54,387
From Hospital Boards and local authorities	31,524	33,864	35,006	36,812	40,638
Rents and other sources ..	5,429	5,523	5,097	6,908	7,588
Totals	99,889	105,496	110,609	114,122	131,850

Benevolent Asylums and Charitable Institutions.

The various benevolent asylums and charitable institutions are placed on a similar footing to the hospitals. Most of the Boards of hospital districts are also Charitable Aid Boards; but, for the

purpose of distributing charitable aid only, some of the hospital districts have been united into larger districts, so that, although there are thirty Boards for hospital purposes, there are only twenty-three for charitable-aid purposes.

Returns were received from nineteen benevolent asylums (not including orphanages), established for the support of indigent persons. The number of inmates in these institutions at the end of 1902 was 1,222, of whom 725 were males and 497 females. Out-door relief was given by three of these institutions to 1,944 persons (including 1,206 children).

Auckland Sailors' Home.

There is a Sailors' Home at Auckland for the use of seafaring men resident in or visiting the town. The late Edmund Costley having left a large sum for charitable purposes, it was resolved to employ the bequest in building and endowing an institution where sailors might be received without distinction of race or religious belief, and board, lodging, and refreshments provided for them, together with such instruction and amusements as might tend to promote their social comfort and general welfare.

The Home, built in 1887, has room for 35 inmates, who are charged 15s. a week for board and lodging. It is managed by a council of eight members elected by the subscribers to the institution. The late Primate of New Zealand, who first originated the scheme, was Life President.

Orphan Asylums.

There were in 1902 four orphan asylums in the colony, one maintained by a District Hospital Board, one by the Church of England authorities, and two by clergy of the Roman Catholic Church; three of them receiving, at the charge of the State, orphan, destitute, and other children committed to them by a Stipendiary Magistrate.

Exclusive of the children so committed, 17 male and 30 female orphans were received during the year 1902, and 53 male and 83 female orphans remained as inmates at the end of the year.

Orphanages receiving committed children are, for that purpose, constituted "industrial schools."

Lunatic Asylums.

There are seven public lunatic asylums in the colony, maintained wholly or in part out of the public revenue. There is also one private asylum, licensed by the Governor for the reception of lunatics.

The amount of sleeping-accommodation provided in each of the public asylums is shown in tabular form, giving separately the number and cubic contents of the sleeping-rooms intended for one person only, and of the dormitories occupied by several inmates conjointly, together with the number of patients actually in the asylums on the 31st December, 1902:—

—	Sleeping-rooms for One Person only.			Dormitories for more than One Person.		
	Number.	Aggregate Number of Cubic Feet.	Inmates (Patients) on 31st December, 1902.	Number.	Aggregate Number of Cubic Feet.	Inmates (Patients) on 31st December 1902.
Auckland ..	133	119,280	133	25	252,672	405
Wellington ..	77	72,509	77	16	100,173	200
Porirua ..	68	63,217	68	14	307,512	434
Nelson ..	38	32,228	38	14	65,112	100
Hokitika ..	31	23,223	31	8	69,302	88
Christchurch	80	69,651	80	34	227,010	476
Seacliff ..	176	144,839	176	46	263,534	486
Totals ..	603	524,947	603	157	1,285,315	2,189

At Ashburn Hall, Waikari, there are 66 rooms, each for one person only, with an aggregate cubic content of 64,913 ft. The number of patients on the 31st December, 1902, was 42.

At the end of 1902, 1,695 male and 1,111 female patients (including 14 out on trial) were under the care of the asylum officers of the colony. Of these, 1,604 males and 1,043 females were regarded as incurable, 6 males and 8 females were out on trial, and 85 males and 60 females were supposed to be curable. 160 male and 116 female patients were discharged during the year.

The following shows the proportion of insane—or, rather, of inmates of lunatic asylums and those out on trial—to the population (exclusive in each case of Maoris) at the end of the years stated :—

1884,	1	insane person to	every 393	of population.
1886,	"	"	370	"
1888,	"	"	365	"
1890,	"	"	348	"
1892,	"	"	339	"
1894,	"	"	316	"
1896,	"	"	308	"
1898,	"	"	300	"
1899,	"	"	296	"
1900,	"	"	288	"
1901,	"	"	286	"
1902,	"	"	286	"

It must not be overlooked that the proportions are increased by the admission into the asylums of inebriates, idiots, and others, who should not properly be there.

Information as to lunacy, extracted from the results of the census, will be found on pp. 150 and 151.

Deaf, Dumb, and Blind.

Particulars relating to the deaf, dumb, and blind, as ascertained at last census, are referred to on pp. 147 to 150 *ante*.

SECTION XXII.—METEOROLOGY.

Temperature, Rainfall, Atmospheric Pressure, and Wind, throughout New Zealand, as observed at Eight Stations, for the Year 1902.

(*From Tables prepared by Sir James Hector.*)

The Observations were taken at 9.30 A.M.

Stations and Months.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest.	Lowest.	Wet Days.	Fall.		
Auckland (lat. 36° 50′ S.; long. 174° 50′ 40″ E.; alt. 125 ft.)—	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January	78·0	52·0	11	1·580	29·930	SW.
February	79·0	54·0	7	0·440	30·100	SW.
March	79·5	53·0	10	3·340	30·140	NE, SW.
April	73·0	46·0	19	6·270	30·140	SW, NE.
May	67·0	45·0	25	6 300	29·950	SW, S.
June	62·0	40·0	12	3·220	30·160	NE.
July	60·0	38·0	17	2·140	30·180	SW, SE.
August	62·0	39·0	16	2·330	30·130	SW, SE.
September	63·0	41·0	22	6·210	29·900	SW.
October	68·0	41·0	16	2·740	30·040	SW.
November	72·0	48·0	12	0·880	30·060	SW.
December	75·0	50·0	17	2·830	30·010	SW, NE.
Rotorua (lat. 38° 9′ S.; long. 176° 15′ E.; alt. 990 ft.)—						
January	90·5	42·0	12	2·690	29·120	SW.
February	90·0	40·0	7	3·080	30·220	SW, N.
March	79·5	36·5	9	5·680	30·230	SW.
April	75·5	30·0	12	8·960	30·210	SW.
May	71·0	28·0	10	4·300	29·960	SW, W.
June	64·0	27·0	11	6·550	30·240	SW, S.
July	62·0	26·0	4	0·450	30·220	SW.
August	61·0	27·0	11	4·110	30·200	SW.
September	64·0	26·0	16	5·200	29·930	SW.
October	74·0	28·5	11	5·330	30·150	W.
November	75·0	33·0	7	0·920	30·130	SW, W.
December	85·0	36·0	10	1·450	30·160	W.

Stations and Months.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest.	Lowest.	Wet Days.	Fall.		
New Plymouth (lat. 39° 3′ 35″ S.; long. 174° 4′ 58″ E.; alt. 100 ft.)—	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January	83·0	46·0	19	3·600	29·990	SW.
February	84·0	46·0	13	2·590	30·110	SW, NW.
March	80·0	41·0	14	2·630	30·190	SE.
April	83·0	34·0	24	6·340	30.080	SE, SW.
May	84·0	36·0	25	5·960	29·880	SW, SE.
June	83·0	32·0	18	5·030	30·152	SE.
July	84·0	29·0	21	1·490	30·180	SE, SW.
August	82·0	30·0	16	3·800	30·157	SE, SW.
September	86·0	31·0	26	5·830	29·904	W, NW, SE.
October	84·0	30·0	22	5·580	30·078	SW, NW.
November	85·0	36·0	22	3·540	30·100	SW.
December	90·0	40·0	25	5·650	30·017	NW, SW.
Wellington (lat. 41° 16′ 25″ S.; long. 174° 46′ 20″ E.; alt. 140 ft.)—						
January	81·0	48·0	13	2·270	29·879	NW, S.
February	76·5	47·0	12	1·380	29·947	NW, S.
March	77·0	43·0	10	3·100	30·017	NW, S.
April	73·0	39·0	20	4·700	29·993	S.
May	64·0	33·0	21	5·190	29·721	NW, S.
June ..	60·0	33·0	24	4·840	30·122	SW, NW.
July	62·0	32·0	14	2·340	30·082	NW.
August	61·0	35·0	19	2·060	30·067	NW, SW.
September	60·0	34·0	21	3·110	29·753	NW, SW.
October	65·0	35·0	13	3·060	29·878	NW, SW.
November	69·0	38·0	15	2·960	29·840	NW.
December	71·0	41·0	19	3·740	29·844	NW, SW.
Hokitika (lat. 42° 41′ 30″ S.; long. 170° 49′ E.; alt. 12 ft.)—						
January	82·0	44·5	11	16·110	29·846	SW, NW.
February	71·5	44·0	15	9·140	29·964	SW, NW.
March	82·0	39·0	7	4·950	29·988	SW, E.
April	73·5	36·0	14	3·600	29·987	E, SW.
May	66·5	29·0	16	7·120	29·740	SW, E.
June	64·0	28·0	9	8·790	30·105	E.
July	58·5	26·0	13	4·140	30·112	E, SW.
August	61·5	28·0	11	6·350	30·048	SW, E.
September	62·0	28·0	17	6·280	29·810	SW.
October	69·0	30·0	18	9·160	29·911	SW, NW.
November	67·0	32·0	19	9·950	29·887	SW, NW.
December	71·0	38·0	16	10·480	29·825	SW, NW.

Stations and Months.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest.	Lowest.	Wet Days.	Fall.		
Lincoln College, Canterbury (lat. 43° 32′ 16″ S.; long. 172° 38′ 59″ E.; alt. 65 ft.)—	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January	88·0	39·0	7	0·840	29·794	NE, SW, NW.
February	88·0	42·7	10	1·625	29·907	NE.
March	84·4	34·5	14	4·300	29·971	NE, SW.
April	71·6	32·0	17	1·355	29·999	NE, SW.
May	63·5	28·6	20	2·770	29·658	SW, NE.
June	66·3	26·2	14	1·710	30·130	SW, NE.
July	65·5	27·5	10	1·175	30·007	NE.
August	66 5	27·0	8	1·090	30 037	NE, SW.
September	64·5	25·9	12	1·465	29·718	SW, NE.
October	81·6	29·6	8	1·295	29 811	NE.
November	81·4	35·4	9	1·115	29·733	SE, NW.
December	83·8	33·2	25	5·750	29·836	NE, SE, SW.
Dunedin (lat. 45° 52′ 11″ S.; long. 170° 31′ 7″ E.; alt. 300 ft.)—						
January	78·0	42·0	14	3·598	29·720	W.
February	86·0	38·0	15	6·406	29·813	NE, SW.
March	75·0	42·0	15	14·386	29·929	NE.
April	70·0	38·0	18	4·206	29·938	SW.
May	58·0	32·0	17	2·702	29·612	SW.
June	60·0	29·0	13	4·310	30·045	SW, NE.
July	60·0	33·0	13	1·492	29·933	SW.
August	55·0	32·0	9	1·374	29·917	SW.
September	61·0	33·0	20	5·174	29·648	SW, NE.
October	70·0	32·0	13	2·210	29·729	SW.
November	75·0	38·0	16	2·302	29·657	W, SW.
December	71·0	38·0	21	5·404	29·734	SW, W.
Chatham Islands (lat. 43° 52′ S.; long. 176° 42′ W.; alt. 100 ft.)—						
January	72·0	43·0	10	1·200	29 690	SW.
February	71·0	42·0	12	3·750	29·820	NW.
March	69·0	43·0	17	2·930	29·870	SE.
April	66·0	41·0	21	5·980	29 730	SW.
May	61·0	36·0	23	5·720	29·260	SW, W.
June	57·0	37·0	20	2·460	29·920	SW, NW.
July	57·0	33·0	26	2·860	29 640	SW.
August	61·0	32·0	24	4·100	29·830	SE.
September	59·0	36·0	23	4·810	29 370	SW.
October	59 0	34·0	14	1 610	29·620	SW.
November	62·0	34·0	19	3·160	29·530	SW.
December	64·0	39·0	14	1·140	29·590	SW.

EIGHT STATIONS: COMPARATIVE TABLE: YEAR 1902.

Stations.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest, and Date.	Lowest, and Date.	Days on which Rain fell.	Greatest Fall, and Date.		
	° Fahr.	° Fahr.	No.	Inches.	Inches.	
Auckland	79·5, 1 Mar.	38·0, 17 July	184	2·280, 8 April	30·061	SW, NE.
Rotorua	90·5, 20 Jan.	26·0, 11 July, 10 Sept	120	3·600, 2 April	30·034	SW. W.
New Plymouth ...	90·0, 26 Dec.	29·0, 16, 17 July	245	1·180, 24 June	30·070	SE, SW.
Wellington	81·0, 13 Jan.	32·0, 17 July	201	1·980, 11 May	29·928	NW, SW.
Hokitika	82·0, 10, 15 Jan., 8 Mar.	26·0, 15 July	166	3·930, 23 Jan.	29·934	SW, E, NW
Lincoln	88·0, 16, 18 Jan., 4 Feb.	25·9, 3 Sept.	154	0·840, 24 Jan.	29·883	NE, SW.
Dunedin	86·0, 3 Feb.	29·0, 18 June	181	3·960, 24 Mar.	29·806	SW, W.
Chatham Islands ...	72·0, 19 Jan.	32·0, 1 Aug.	223	1·250, 9 Sept.	29·656	SW, NW.

SUNSHINE IN NEW ZEALAND.

The comparative tables of the amount of sunshine recorded in Surrey and in Christchurch respectively during last year, and published in the Christchurch *Press*, afford valuable proof of the brightness of this climate as compared with that of England. The English records were taken at a place near Hindhead, on the Surrey highland, first made known by Professor Tyndall selecting a site for a house there. The district has since become famous as one of the healthiest and sunniest in England, and these characteristics, coupled with its comparative proximity to London, have made it a popular residential district. It is a case, then, of one of the most sunny districts in England being compared with a New Zealand town, which we can hardly suppose to be more blessed with sunshine than many other places in the colony. This being so, it will be admitted that Christchurch comes splendidly out of the test with 1,749·59 hours of sunshine during the year, as against Surrey's 1,492·2 hours, a difference in favour of New Zealand of 257 hours. Nor is this the most striking comparison. The sun shone here on all but thirty-nine days in the year, while at Hindhead there were no less than eighty-one absolutely sunless days. The monthly average of days on which the sun shone in Christchurch was twenty-seven, in Surrey it was under twenty-four. The winter comparisons are still more forcible. Taking the four months from November to February as the English winter months, and those

from May to August as the corresponding months out here, we find that whereas three of the months in England had but sixteen days each on which sunshine was recorded, and the fourth had only fifteen days, in Christchurch during the winter months the sun was seen on twenty-eight, twenty, thirty, and twenty-nine days respectively. Our worst month was June, with little more than fifty-five hours of sunshine; but in Surrey December had only forty-two sunny hours, January had fifty-four, and February fifty-five. On the other hand, the best English summer record beats ours. July in Surrey had 229 hours of sunshine, our January had 217; but it must be remembered that summer days in England are longer than with us, just as our winter days are longer than with them.

Grayshot, Surrey, England.				Christchurch, New Zealand.			
Months, 1902.	Days with Sun.	Days no Sun.	Total Hours.	Corresponding Months in New Zealand.	Days with Sun.	Days no Sun.	Total Hours.
Spring—				Spring—			
February ..	15	13	55·7	August ..	29	2	146·16
March ..	26	5	118·5	September	29	1	149·58
April ..	28	2	165·3	October ..	31	0	191·50
Summer—				Summer—			
May ..	28	3	179·0	November ..	28	2	203·20
June ..	27	3	189·6	December ..	27	4	143·58
July ..	30	1	229·4	January ..	29	2	217·75
Autumn—				Autumn—			
August ..	30	1	136·9	February ..	25	3	154·08
September ..	29	1	178·0	March ..	23	8	121·25
October ..	23	8	78·8	April ..	27	3	97·08
Winter—				Winter—			
November ..	16	14	64·0	May ..	28	3	110·58
December ..	16	15	42·8	June ..	20	10	55·75
January ..	16	15	34·2	July ..	30	1	159·08
Total ..	284	81	1492·2	Total ..	326	39	1749·59

The ollowing table, compiled from information published in the Statistical Abstract for the Colonial Possessions of the United Kingdom, shows the shade temperature for each month in New Zealand and other British States and Colonies. The figures given are the means of four years (H signifies highest, and L lowest):—

British Possessions (Stations and Height in Feet above Sea Level where known).	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Year.	
	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.
	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
New Zealand—																										
Wellington (140)	78	45	78	47	76	44	70	43	66	38	62	34	59	33	62	34	65	37	69	41	74	33	75	44	78	33
Queensland—																										
Brisbane (130)	92	64	93	63	91	61	85	54	80	50	76	42	75	39	78	41	85	46	91	50	94	57	97	61	97	39
New South Wales—																										
Sydney (155)	92	59	89	58	84	59	79	51	72	48	67	44	63	39	70	42	77	45	88	48	87	54	94	57	94	39
Victoria—																										
Melbourne (91)	101	48	99	47	99	45	86	40	74	37	64	37	62	32	68	34	74	34	81	40	94	44	96	45	101	32
South Australia—																										
Adelaide (140)	108	49	106	50	100	48	89	45	78	40	67	38	65	36	74	9	79	41	86	41	96	45	101	48	108	36
Western Australia—																										
Perth (47)	107	50	102	53	98	52	96	57	81	40	70	38	70	37	73	38	80	42	83	42	93	48	100	51	107	37
Tasmania—																										
Hobart (160)	91	45	94	45	93	44	75	38	71	37	61	34	59	33	66	33	72	35	77	35	92	40	86	43	94	33
Natal—																										
Durban (150)	99	63	95	61	94	60	94	58	89	52	86	49	88	48	91	49	96	50	91	53	97	57	98	59	99	49
Cape Town—																										
Royal Observatory (37)	94	54	90	51	92	49	86	45	80	42	76	39	74	37	76	37	83	39	86	44	89	48	90	52	94	37
Hongkong—																										
Observatory (110)	73	47	78	46	77	49	84	58	89	68	91	73	91	74	91	74	92	70	90	66	82	55	79	49	91	46
Straits Settlements—																										
Singapore (30)	88	70	90	70	91	71	91	73	90	73	90	72	90	72	89	72	89	71	89	71		71	89	70	91	70
Mauritius—																										
Royal Alfred Observatory (179) ...	84	69	84	71	84	70	82	70	80	62	77	60	75	59	75	59	77	62	80	62	82	66	84	68	84	59
Canada—																										
Toronto (350)	47	-3	45	-3	51	6	71	22	78	31	86	44	88	46	89	47	82	41	71	27	56	13	45	-1	89	-3
Montreal (187)	45	-14	42	-13	44	0	69	24	81	32	87	43	88	50	86	50	81	39	70	27	59	11	43	-11	88	-13
St. John (*N.B.*) (116)	49	-7	46	-7	47	4	62	22	69	33	81	42	79	49	77	48	73	37	60	26	56	16	49	-3	81	-7
Halifax (122)	50	-1	46	-3	50	10	63	22	73	32	83	39	84	48	84	49	80	36	69	29	60	21	51	3	84	-3
Charlottetown, Prince Edward Island (38)	47	-6	43	-9	47	5	60	20	70	31	77	39	80	49	79	49	75	39	66	30	58	19	47	1	80	-9
Winnipeg, Manitoba (764) ...	34	-37	32	-37	49	-25	76	8	82	20	90	35	87	40	91	34	86	30	73	17	53	-16	39	-29	91	-37
Victoria, British Columbia (10) ...	51	14	55	22	60	30	67	29	73	38	76	39	79	43	76	44	71	38	64	35	55	30	51	23	79	14
St. John's, Newfoundland (125) ...	48	-6	50	-8	50	11	61	15	71	27	76	33	81	41	79	42	78	33	65	24	62	19	51	9	81	-8
Barbados—																										
Joes River (430)	81	67	81	67	83	69	84	70	84	71	85	72	84	70	85	70	85	71	85	71	84	70	83	69	85	67
Bahamas—																										
Military Hospital	77	63	79	68	79	67	84	69	89	72	88	73	89	78	89	73	87	75	86	77	82	70	77	67	89	63
Jamaica—																										
Kingston (60)	91	63	90	63	90	62	91	68	91	70	92	71	95	71	93	73	92	70	93	69	91	67	90	63	95	62
Trinidad (130)	86	67	87	68	88	69	88	70	89	70	86	71	86	71	86	70	89	70	88	70	87	70	85	69	89	67

SECTION XXIII.—ACCUMULATION: PRICES AND WAGES.

Banks of Issue.

In December, 1902, five banks of issue were doing business in New Zealand, the Bank of New Zealand and the Colonial Bank having amalgamated in 1895. Two of the five banks, the Bank of New Zealand and the National Bank of New Zealand (Limited), were wholly New Zealand institutions, with a paid-up capital of £750,000, besides which the Bank of New Zealand has £2,000,000 of 4 per cent. stock guaranteed by the Government of the colony. The total average liabilities of all five banks for the year 1902 in respect of New Zealand transactions were £18,701,063, and the average assets £18,999,180. The average amount on deposit during the year was £17,231,767, of which sum £1,090,174 belonged to the General Government. Excluding those belonging to Government, deposits to the value of £8,531,614 were bearing interest, and £7,609,979 at call. The value of the notes in circulation of these banks was £1,375,788.

The development of banking in New Zealand since the year 1857 has been very great. Taking for each year the average of the four quarters' returns made by the banks of issue, the figures for 1857, 1870, 1880, 1890, 1900, and 1902 are :—

Year.	Deposits. £	Assets. £	Liabilities. £
1857	343,316	419,860	432,494
1870	3,127,769	6,315,354	3,819,670
1880	8,538,935	14,220,275	9,550,177
1890	12,368,610	17,735,259	13,356,598
1900	15,570,610	17,314,535	16,964,582
1902	17,231,767	18,999,180	18,701,063

In 1880 the deposits of these banks were £18·00 per head of the mean population; in 1890 they were £19·92 per head; and in 1902, £21·60. The ratio of advances to deposits, which was 132·34 per cent. in 1880, reached its maximum in 1883, when it stood at 173·35 per cent. The proportion since that year fell, till in 1897 it was only 76·21 per cent. In 1898, however, the ratio had advanced to 80·52 per cent., and in 1899 still further, to 80·92 per cent. In 1900 there was again a decline, to 77·61 per cent.; in 1901 a substantial advance to 81·74 per cent. was shown, the highest proportion since 1895; but in 1902 the ratio again fell to 79·31 per cent.

The following figures, which are taken from the published returns for the December quarter of each year, show that the value of the coin and bullion held by all the banks of issue doing business in New Zealand rose steadily from 1891 to 1895, in which year the value stood at £3,333,272. Since that date the value gradually decreased year by year to £2,636,177 in December quarter, 1899, but rose again to £2,802,232 in December, 1900, to £3,063,843 in December, 1901, and further to £3,292,090 in 1902:—

Quarter ended 31st December	Coin.	Gold and Silver in Bullion or Bars.	Total Coin and Bullion.
	£	£	£
1890	2,421,530	169,659	2,591,189
1891	2,231,242	126,346	2,357,588
1892	2,381,319	141,406	2,522,725
1893	2,480,453	121,496	2,601,949
1894	3,103,355	118,121	3,221,476
1895	3,199,889	133,383	3,333,272
1896	3,171,702	122,901	3,294,603
1897	2,848,183	107,635	2,955,818
1898	2,625,896	126,349	2,752,245
1899	2,511,102	125,075	2,636,177
1900	2,658,207	144,025	2,802,232
1901	2,921,268	142,575	3,063,843
1902	3,124,916	167,174	3,292,090

The figures shown for each quarter of the year 1902 are :—

	Coin. £	Bullion. £
March quarter, 1902	2,967,730	151,813
June "	2,986,222	174,489
September "	3,081,713	153,236
December "	3,124,916	167,174

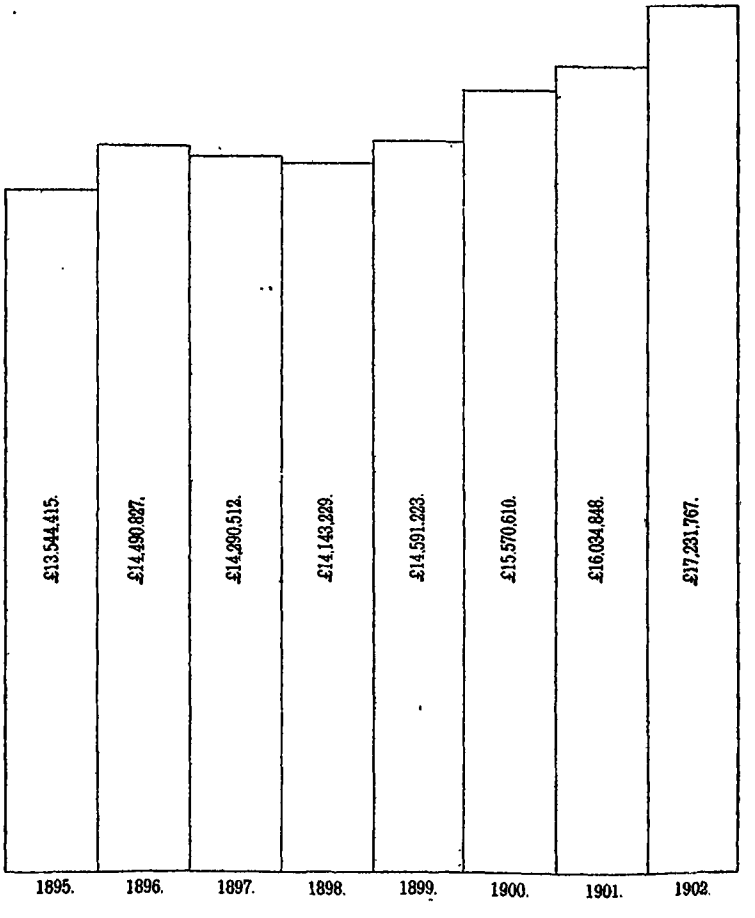
In 1886 the average amount of advances made by the banks was £15,853,420, equal to £27·23 per head of the mean population. The advances gradually declined in amount and proportion to population until 1891, when they were in value £11,549,145, or £18·34 per head. During the years 1892 and 1893, however, there was a rise, but in 1894 a fall to £12,031,537 (£17·71 per head), and in 1897 to £10,892,111, or £15·09 per head, which is the lowest average since the year 1872. In 1898 an increase both in the average amount of advances and in the rate per head of population (£11,387,321 and £15·47 respectively) was observed; in 1899 there was a further increase to £11,806,859, or £15·74 per head; in 1900 to £12,084,744, or £15·83 per head; in 1901 to £13,106,909, or

DIAGRAM No. 7.

BANKS OF ISSUE.

DEPOSITS, 1895 to 1902.

(Average of four quarters.)



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£16·85 per head; and in 1902 to £13,666,457, or £17·13 per head. The discounts in 1902 amounted to £1,814,639, or £2·27 per head of mean population. The largest amount of discounts in any year was £6,061,959 in 1879, a rate of £13·53 per head. From 1879 there was a fall year by year until 1896, when the sum was £1,756,791, or £2·49 per head. In 1897 they totalled £1,768,845, but, with a comparatively larger population, the rate per head was only £2·45. In 1898 the amount fell to £1,719,715, and the rate per head to £2·34. In 1899 there was a further decline, in the amount to £1,692,201 and in the rate per head to £2·26; but in 1900 a rise to £1,730,809, or £2·27 per head, and in 1901 to £1,896,869, the rate being £2·44 per head. In 1902 the amount declined to £1,814,639, and the rate to £2·27 per head.

The deposits, as stated in the returns for the March quarters of the years 1903 and 1902, were:—

	£
Deposits not bearing interest, March quarter, 1903	8,259,884
" " " March quarter, 1902	7,087,161
An increase of	£1,172,723

in the amount held at call. The fixed deposits show a similar movement, but of lesser magnitude:—

	£
Deposits bearing interest, March quarter, 1903 ..	8,736,644
" " March quarter, 1902 ..	8,318,439
An increase of	£418,205

Besides the above, the Government had with the Bank of New Zealand £1,451,651 on deposit in March, 1903, as against £1,255,294 in March, 1902.

An account of the special banking legislation of 1893 and its subsequent developments will be found in the previous issues of the Year-book. (See page 400, Year-book 1902.)

SAVINGS-BANKS.

The number of post-offices open for the transaction of savings-bank business at the end of 1902 was 481.

There were 53,587 new accounts opened in the year, and 38,558 accounts were closed. The total number of open accounts at the end of 1902 was 227,465, or 1 in every 3·55 of the population.

The deposits received during the year amounted to £5,069,619 6s. 2d., and the withdrawals to £4,708,771 11s. 2d., the excess of deposits over withdrawals having thus been £360,847 15s. The total sum standing at credit of all accounts on the 31st December, 1902, was £6,883,787 5s. 9d., which gave an average of £30 5s. 3d. to the credit of each open account.

The number of open accounts (as on the 31st December) for the last five years are classified according to amounts at credit of each:—

	1898.	1899.	1900.	1901.	1902.
Not exceeding £20	125,190	133,851	142,368	153,593	161,989
Exceeding £20 and up to £50	18,001	20,206	22,333	23,743	25,520
" £50 " £100	11,238	12,286	13,704	14,705	16,621
" £100 " £200	9,641	10,403	11,173	12,797	14,657
" £200 " £300	3,573	3,915	5,151	4,765	5,473
" £300 " £400	1,111	1,145	1,238	1,394	1,619
" £400 " £500	639	654	773	768	860
" £500	575	586	668	671	726
Totals	169,968	183,046	197,408	212,436	227,465

The following were the securities, &c., standing in the name of the Postmaster-General on account of the Post-Office Savings-Bank Fund on the 31st December, 1902:—

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
"Aid to Public Works and Land Settlement Act, 1896," Debentures, 3½ per cent. ..	100,000	0	0	100,000	0	0
"Aid to Public Works and Land Settlement Act, 1899," Debentures, 3½ per cent. ..	125,000	0	0	125,000	0	0
Aid to Public Works and Land Settlement Acts, 1896 and 1897, Debentures, 3 per cent. ..	65,000	0	0	65,000	0	0
"Aid to Public Works and Land Settlement Act, 1902," Debentures, 4 per cent. ..	100,000	0	0	100,000	0	0
"Consolidated Loan Act, 1867," Debentures, 4 per cent.	13,000	0	0	12,480	0	0
"Consolidated Stock Act, 1884," Debentures, 3½ per cent.	629,100	0	0	629,100	0	0
"Dairy Industry Act, 1898," Debentures, 3½ per cent.	1,781	0	0	1,781	0	0
"Defence and other Purposes Loan Act, 1870," Debentures, 4 per cent.	75,000	0	0	72,000	0	0
"Defence and other Purposes Loan Act, 1870," Debentures, 4½ per cent.	8,100	0	0	8,100	0	0
District Railways Purchasing Acts, 1885 and 1886, Debentures, 4 per cent.	42,000	0	0	36,076	17	8
District Railways Purchasing Acts, 1885 and 1886, Scrip, 4 per cent.	34,100	0	0	34,100	0	0
Dunedin Garrison Hall Debentures, 5 per cent.	6,000	0	0	6,000	0	0
"General Purposes Loan Act, 1873," Debentures, 4 per cent.	5,200	0	0	4,342	0	0
"Government Loans to Local Bodies Act, 1886," Debentures, 3½ per cent.	231,500	0	0	231,500	0	0
Greymouth Harbour Board Debentures, 4 per cent.	105,000	0	0	105,000	0	0
Hamilton Borough Debentures, 4½ per cent...	3,000	0	0	3,000	0	0
Hokitika Harbour Board Debentures, 5 per cent.	10,000	0	0	10,000	0	0

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.		s.	d.
"Immigration and Public Works Loan Act, 1870," Debentures, 4 per cent.	174,200	0	0	167,272	0	0
"Immigration and Public Works Loan Act, 1870," Debentures, 4½ per cent. ..	20,900	0	0	20,527	10	0
"Immigration and Public Works Loan Act, 1870," Debentures, 4 per cent. (Imperial guaranteed)	400,000	0	0	400,000	0	0
Inscribed Stock, 3 per cent.	2,134,940	0	0	2,129,614	0	0
"Land for Settlements Act, 1894," Debentures, 3½ per cent.	731,066	0	0	731,066	0	0
Land for Settlements Act Debentures, 3½ per cent.	62,000	0	0	62,000	0	0
"Lands Improvement and Native Lands Acquisition Act, 1894," Debentures, 4 per cent.	264,000	0	0	264,000	0	0
"Lands Improvement and Native Lands Acquisition Act, 1894," Debentures, 3½ per cent	35,000	0	0	35,000	0	0
"Local Bodies' Loans Act, 1901," Debentures, 3½ per cent.	245,000	0	0	245,000	0	0
Oamaru Borough Consolidated Loan 1893 Debentures, 5 per cent.	13,800	0	0	13,800	0	0
Oamaru Harbour Bonds, 5½ per cent. ..	31,000	0	0	31,000	0	0
Patea Harbour Board Debentures, 4½ per cent.	13,000	0	0	13,000	0	0
"State Coal-mines Act, 1901," Debentures, 3½ per cent.	30,000	0	0	30,000	0	0
Thames Harbour Board Debentures, 4 per cent.	10,000	0	0	10,000	0	0
"Public Revenues Act, 1893" (Treasury Bills), 3½ per cent.	749,200	0	0	749,200	0	0
Westport Harbour Board Debentures, 4 per cent.	489,500	0	0	489,500	0	0
Totals	6,957,387	0	0	6,934,459	7	8

Practically nearly the whole of this fund is invested in securities of the New Zealand General Government. Summarising the figures shows the investments to be:—

	£
In New Zealand Government securities	6,276,087
In local bodies' securities	675,300
In other securities	6,000
Total	£6,957,387

There are five savings-banks in the colony not connected with the Post Office. The total amount deposited in them in 1902 was £747,764 0s. 9d., of which the deposits by Maoris comprised £152 11s. 9d. The withdrawals reached the sum of £701,262 10s. 5d., or less than the total deposits by £46,501 10s. 4d. The total amount to the credit of the depositors at the end of the year was £993,090 7s. 2d., of which sum £143 13s. 1d. belonged to Maoris.

Summary of all Deposits.

If the total deposits at the end of the year be assumed to be equal to the average for the last quarter, then it may be affirmed that, exclusive of Government moneys, the deposits in the several banks of issue and in the two classes of savings-banks amounted at the end of 1902 to £24,018,470. In addition, there are the deposits with building societies, which in 1900 were £249,530, and it is known that there were also deposits with financial companies of which no particulars have been supplied to the Department. The known deposits reach an average of £30 0s. 9d. per head of the population, exclusive of Maoris.

Building Societies.

There were 68 registered building societies in operation in the colony at the end of 1900. Of these, 33 were terminable societies, the rest were permanent.

The total receipts by these societies during their financial year were £659,367, of which deposits comprised £237,542.

The assets at the end of the year were valued at £1,137,642. The liabilities were: To shareholders, reserve fund, &c., £864,860; to depositors, £249,530; and to bankers and other creditors, £23,252.

Joint-stock Companies.

During the year ended 31st December, 1902, 183 joint-stock companies, with a total nominal capital of £1,924,865, and two guarantee companies, were registered under the provisions of "The Companies Act, 1882."

Friendly Societies.

The Registrar of Friendly Societies received returns for the year 1901 from 445 lodges, courts, tents, &c., of various friendly societies throughout the colony. The number of members at the end of 1901 was 41,236.

The total value of the assets of these societies was £804,753, equivalent to £19 10s. 4d. per member. Of the total assets, the value of the sick and funeral benefit funds was £744,089.

The receipts during the year on account of the sick and funeral funds amounted to £100,487, and the expenditure to £67,363, of which the sick-pay to members reached the sum of £43,921. In addition to the sick-pay, the sum of £37,840 was paid out of the medical and management expenses fund for attendance given and medicine supplied to the members and their families.

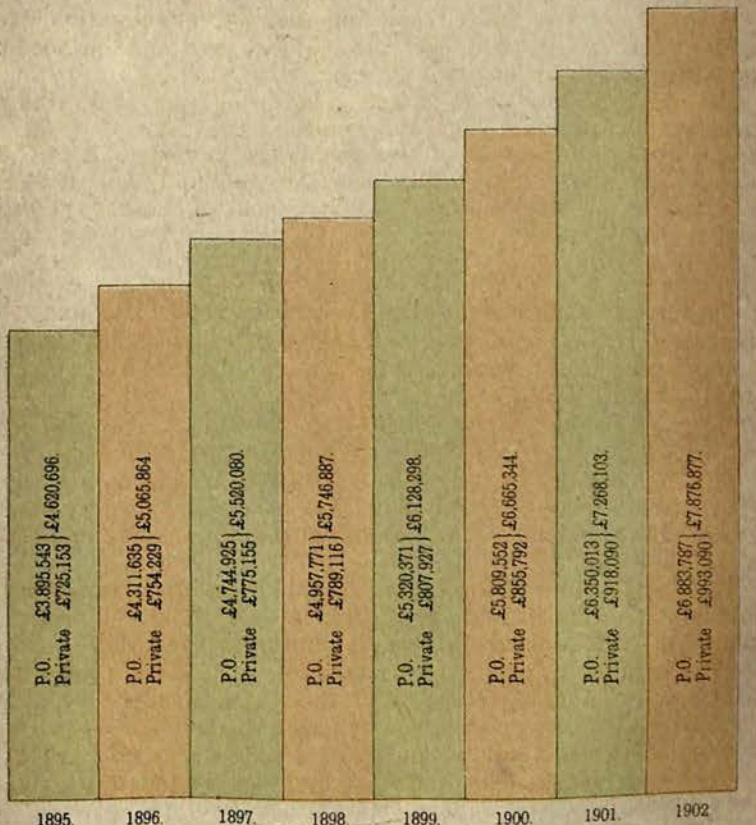
The Registrar of Friendly Societies has supplied particulars of the number of members of friendly societies, the amount of their accumulated capital, and the average capital per member in Australasia, according to the latest published statistics, arranged in order of membership:—

DIAGRAM No. 8.

SAVINGS-BANKS.

(POST-OFFICE AND PRIVATE.)

AMOUNTS TO CREDIT OF DEPOSITORS AT END OF YEAR,
1895 to 1903.



To face page 452.

State or Colony.	Date of Return.	Number of Lodges.	Number of Members.	Amount of Funds.	Capital per Member.
				£	£ s. d.
Victoria	31st Dec., 1900	1,111	97,937	1,316,370	13 8 10
New South Wales ..	" 1897	817	69,124	596,463	8 12 7
New Zealand ..	" 1901	445	41,236	804,753	19 10 4
South Australia ..	" 1899	396	39,346	535,198	13 12 1
Queensland ..	" 1901	361	31,167	269,111	8 12 8
Tasmania	" 1899	117	12,883	100,562	7 16 1
Western Australia ..	" 1900	108	6,890	46,306	6 14 5

New Zealand shows by far the highest average of capital per member, South Australia and Victoria following, but not closely, while the averages of New South Wales, Queensland, Western Australia, and Tasmania are less than half the sum shown for this colony.

MORTGAGES.

In a return to an order of the House of Representatives it is stated that during the year ended 31st March, 1902, mortgages to the value of £8,256,913 were registered in the several land registration districts of the colony, while the monetary value of those paid off amounted to £5,924,368. Compared with a similar return for the year 1900–1901 the mortgages registered show an increase of £825,215, the total amount for the earlier year having been £7,431,698.

The total amounts represented in the mortgages registered and paid off in each registration district during 1900–1901 and 1901–1902 were :—

District.	1901-1902.		1900-1901.	
	Mortgages registered.	Mortgages paid off.	Mortgages registered.	Mortgages paid-off.
	£	£	£	£
Auckland ..	768,556	596,475	663,121	507,886
Poverty Bay ..	254,649	184,839	214,394	169,279
Taranaki ..	781,287	688,165	872,111	498,149
Hawke's Bay ..	866,311	452,948	685,395	494,964
Wellington ..	2,042,942	1,411,388	2,108,812	1,257,352
Marlborough ..	242,866	156,143	132,106	140,648
Nelson ..	145,104	87,927	183,022	127,172
Westland ..	36,950	22,033	25,821	14,305
Canterbury ..	1,932,005	1,651,569	1,424,780	1,057,458
Otago ..	661,035	409,536	569,442	552,289
Southland ..	525,208	263,345	552,694	263,115
Totals ..	£8,256,913	£5,924,368	£7,431,698	£5,082,617

Classified according to the various rates of interest, the amounts in the mortgage deeds registered during the two years were :—

1900-1901. £		1901-1902. £		Rate of Interest.
78,319	..	119,626	..	at 4 per cent or under.
1,652,410 (*a*)	..	1,876,506 (*h*)	..	at 4½ per cent.
80,310 (*b*)	..	79,994 (*i*)	..	at 4¾ per cent.
2,242,362	..	2,889,148	..	at 5 per cent.
19,520	..	13,435	..	at 5¼ per cent.
421,578 (*c*)	..	481,913	..	at 5½ per cent.
5,300	..	4,895	..	at 5¾ per cent.
670,472	..	651,315	..	at 6 per cent.
4,071 (*d*)	..	590	..	at 6¼ per cent.
135,793	..	84,736	..	at 6½ per cent.
100	..	450	..	at 6¾ per cent.
244,248 (*e*)	..	244,891	..	at 7 per cent.
22,619 (*f*)	..	40,902	..	at 7½ per cent.
188,102 (*g*)	..	193,757	..	at 8 per cent.
66,142	..	95,005	..	at 8½ per cent. and over.
1,600,352	..	1,475,075	..	at rates not specified.
..	..	4,675	..	free.
£7,431,698		£8,256,913		

(*a*.) Including £700 at 4¼ per cent. (*b*.) Including £22,000 at 4⅜ per cent. (*c*.) Including £300 at 5⅛ per cent. (*d*.) Including £2,360 at 6⅛ per cent. (*e*.) Including £100 at 7¼ per cent. (*f*.) Including £200 at 7⅜ per cent. (*g*.) Including £30 at 8¼ per cent. (*h*.) Including £12,000 at 4⅛ per cent., £14,000 at 4 $\frac{5}{16}$ per cent., and £150 at 4½ per cent. (*i*.) Including £6,500 at 4⅝ per cent.

Comparison of the foregoing with the amounts at the various rates of interest in the mortgages registered during 1895–96 shows the lowering of the rates that has taken place :—

Year 1895-96. £			
26,285	..	..	in small sums at less than 5 per cent.
833,226	..	..	at from 5 per cent. to 5¼ per cent.
732,764	..	..	at 5½ per cent.
116,600	..	..	at 5¾ per cent.
1,372,261	..	..	at from 6 per cent. to 6¼ per cent.
371,896	..	..	at from 6½ per cent. to 6¾ per cent.
599,542	..	..	at from 7 per cent. to 7¼ per cent.
111,651	..	..	at 7½ per cent.
382,348	..	..	at 8 per cent.
173,416	..	..	in small sums, at rates above 8 per cent.
853,801	..	..	at rates which are not specified.
£5,573,790			

The total amount shown in deeds as secured by mortgage under the Land Transfer Act on 31st March, 1902, was £40,587,169, as

against £37,767,650 in March, 1901, £35,303,728 in March, 1900, £33,035,337 in March, 1899, £32,152,288 in March, 1898, and £31,112,921 in March, 1897; but in respect of some transactions the same money may be included more than once.

LIFE INSURANCE.

There were existing in the colony at the close of the year 1901 94,429 life insurance policies, an average of 120 in every 1,000 persons living. The gross amount represented by these policies was £23,567,427, an average of £249 11s. 7d. for each policy, and of £29 18s. 5d. for every European inhabitant of the colony at the end of the year.

The distribution of these policies shows that nearly one-half are held in the Government Life Insurance Department:—

Name of Office.	Number of Years of Business in the Colony.	New Zealand Business only.	
		Number of Existing Policies at End of Year 1901.	Gross Amount insured by Policies at End of Year 1901.
			£
Australian Mutual Provident Society	40	28,196	7,709,232
Australian Widows' Fund Life Assurance Society (Limited) ..	4	1,502	407,298
Citizens' Life Assurance Company (Limited)	8	3,563	539,170
Colonial Mutual Life Assurance Society (Limited)	18	4,653	1,224,768
Equitable Life Assurance Society of the United States	17	1,272	501,967
Mutual Life Association of Australasia	25	5,802	1,488,538
National Mutual Life Association of Australasia (Limited)	22	8,004	1,898,750
New York Life Insurance Company..	15	146	55,602
Life Insurance Department of the New Zealand Government ..	32	41,291	9,742,102
Totals, December, 1901 ..	..	94,429	£23,567,427
Totals, December, 1900 ..	..	89,849	£22,629,255

The rate at which life insurance increased is evidenced by the difference between the amounts insured at the end of each of the two years 1900 and 1901, being a sum of £938,172, or 4·15 per cent., while for the same twelve months the population increased by 2·52 per cent. only.

INDUSTRIAL LIFE ASSURANCE.

In addition to the ordinary life insurance transactions alluded to above, there were in 1901 two industrial life assurance offices doing business in New Zealand. The number of policies in existence and the gross amount insured by such policies at the end of the year were:—

Name of Office.	Number of Years of Business in the Colony.	New Zealand Business only.	
		Number of Existing Policies at End of Year 1901.	Gross Amount insured by Policies at End of Year 1901.
			£
The Citizens' Life Assurance Company (Limited)	8	17,376	376,784
The Provident and Industrial Insurance Company of New Zealand ..	12	8,735	194,008
Totals, December, 1901 ..	..	26,111	£570,792
Totals, December, 1900 ..	..	24,562	£544,116

Here an increase of £26,676, or 4·90 per cent., is shown to have taken place in twelve months.

"THE NEW ZEALAND ACCIDENT INSURANCE ACT, 1899."

By this statute the Commissioner of Life Insurance is given power to insure persons from accident, and specially employers against liability for accident to any person employed, besides generally doing the business of an insurer against accident.

The Act provides for capital for the accident insurance business by empowering the Governor in Council to raise by debentures or scrip, or by issue of inscribed stock, sums of money not exceeding £25,000 altogether. To redeem at maturity the securities issued in respect of capital raised there are provisions for a sinking fund.

The funds, assets, and liabilities of the Government Life Insurance Department belonging to its accident insurance branch are to be kept separately and distinct from the main life insurance business, and powers are vested in the Governor to make regulations in regard to tables fixing rates of premiums, and other details, for the conduct of accident insurance.

The income and expenditure for the initial period, June to December, 1901, and the year 1902, were :—

Year.	Income.			Expenditure.			
	Premiums.	Other Receipts.	Total.	Claims.	Management.	Other Expenses.	Total.
	£	£	£	£	£	£	£
1901 (7th June to 31st December)	11,856	41	11,897	2,428	*5,343	30	7,801
1902	14,100	70	14,170	7,364	5,836	40	13,240

* The expenses were unavoidably heavy, and include commission £2,236, salaries £1,674, other expenses of management £1,433.

During last year the premium income amounted to £14,100, an increase of £2,244 over the premiums received during the previous period.

The total claims, including provision for those not actually settled at the close of the year, amounted to £7,364, as against £2,428 in 1901, the rate in proportion to the premiums earned showing a marked increase. A sum of £4,363 is held as a reserve on account of claims accrued but unsettled as at 31st December. The total expenses show a decrease of about 4 per cent. on the premium income as compared with 1901.

A further sum of £240 has been carried to the unearned premium reserve, which now stands at £4,020.

The funds show an increase of £691, and now stand at £1,007.

The Public Trust Office.

This institution was described in full detail in the Year-book for 1898, page 454.

Classifying the business as on the 31st March, 1902 and 1903, the results are :—

	1902.		1903.	
	Number of Estates.	Value of Estates. £	Number of Estates.	Value of Estates. £
Wills and trusts (including sinking funds accounts)	651	1,122,404	744	1,279,743
Intestate estates	923	163,304	989	197,368
Real estates	69	7,317	71	7,585
Lunatic estates	728	163,306	802	170,585
Native reserves	143	366,000	143	375,000
West Coast Settlement Reserves ..	309	625,000	312	655,000
Unclaimed lands	226	20,283	253	21,504
Total	3,049	£2,467,614	3,314	£2,706,785

The capital funds of the Public Trust Office invested amounted, on the 31st March, 1903, to £1,861,308. The investments are as follow :—

	£
New Zealand Government securities	578,343
Local bodies' debentures	31,129
Mortgages of freehold property	1,251,836
Total	£1,861,308

Duties on Estates of Deceased Persons.

By the Amendment Act of 1885 the Schedule of Duties payable under the principal Act of 1881 has been repealed, and the following imposed in lieu thereof :—

1. When the value does not exceed £100	No duty.
2. Upon any amount exceeding £100 but not exceeding £1,000—	
On the first £100	No duty.
And on the remainder	£2½ per cent.
3. Upon any amount exceeding £1,000 but not exceeding £5,000	£3½ per cent.
4. Upon any amount exceeding £5,000, but not exceeding £20,000	£7 per cent.
Upon £20,000 and any amount over that sum	£10 per cent.
Strangers in blood, excepting adopted children	£3 per cent. additional.

These duties are leviable upon the final balance of the real and personal estates.

The exemption in respect of property passing absolutely to widow at death of husband is now extended *vice versâ*.

There are also special provisions in the law affecting children, grandchildren, step-children, and adopted children inheriting property.

The above duties also apply to deeds of gift.

Private Wealth.

The number and value of estates of deceased persons finally certified, on which duty was paid during the years 1900, 1901, and 1902, are shown, classified according to amount :—

Value of Estates.	1900.		1901.		1902.	
	Number of Estates.	Aggregate Value on which Duty was Paid.	Number of Estates.	Aggregate Value on which Duty was Paid.	Number of Estates.	Aggregate Value on which Duty was Paid.
£ £		£		£		£
Under 500 ..	752	146,105	856	158,551	768	161,471
500 to 1,000 ..	224	158,392	225	163,186	254	176,148
1,000 „ 2,000 ..	172	246,012	159	232,961	167	239,166
2,000 „ 3,000 ..	66	161,724	54	130,069	84	208,451
3,000 „ 4,000 ..	37	129,079	33	113,269	36	126,275
4,000 „ 5,000 ..	26	115,295	29	125,701	26	117,013
5,000 „ 7,500 ..	20	121,080	30	181,849	39	235,539
7,500 „ 10,000 ..	16	139,792	29	248,644	17	148,727
10,000 „ 15,000 ..	13	156,649	18	227,423	19	223,970
15,000 „ 20,000 ..	4	69,350	10	167,620	4	68,859
20,000 and over ..	15	517,472	14	603,425	25	1,008,618
Totals ..	1,345	1,960,950	1,457	2,352,698	1,439	2,714,237

Of the 1,457 estates dealt with in 1901, 448, of an aggregate value of £291,145, were devised by females, an average of about £650 for each estate, while in 1902 the estates of females on which duty was paid numbered 414, the declared value being £322,839, an average of nearly £780 each. The estates left by males in the first of the two years under review numbered 1,009, of an aggregate value of £2,061,553, or about £2,043 for each estate; and in the second, 1,025 estates, valued at £2,391,398, an average of £2,333 each.

The number of estates admitted to probate and the number of adult deaths in each year 1898 to 1902 are given, and it will be seen that 26 out of every 100 adults who died during the year 1902 left property subject to estate duty.

Year.	Number of Estates.	Number of Adult Deaths.	Proportion per Cent. of Adults who died leaving Property on which Duty paid.
1898	1,287	4,696	27·41
1899	1,327	4,719	28·12
1900	1,345	4,683	28·72
1901	1,457	5,134	28·38
1902	1,439	5,413	26·58

The private wealth of the colony has been estimated on the basis of the probate returns, the calculation being made on the assumption that the wealth of the living is proportionally equal to that left by the dead. Dividing the aggregate amount admitted to probate during a series of years by the number of *deaths* occurring within the same period, the average value of property left by each person dying is obtained. Then, assuming that the average wealth owned by each person living is equal to that left by each person dying, the total aggregate private wealth may readily be found. For a calculation of this kind it is necessary to take the average results for a series of years, as any inference drawn from the figures of a single year would be untrustworthy; for an increase in the death-rate must necessarily give a corresponding decrease in the estimated wealth, unless the value of estates admitted to probate maintains year by year the same ratio to the number of deaths. An epidemic among young children who have no property to leave would unduly lower the average; while, on the other hand, the deaths of a few wealthy persons would raise it abnormally. By putting the figures for several years together, and taking the average for that term, fairly reliable results may be arrived at, thus:—

Years, inclusive.	Amount sworn to.	Total Number of Deaths.	Average Amount left by each Person.	Average Number of Persons living.	Average Total Wealth for each Year of the Period.
	£		£ s. d.		£
1898–1902	11,329,747	38,133	297 2 3	765,120	227,325,797

It is manifest, however, that this average does not exhibit with sufficient accuracy the actual *present* amount of wealth. If the average amount per head were the same at the end of the year 1902 as for the period 1898–1902—viz., £297·111—then the total wealth possessed by the 807,929 persons in the colony on the 31st December of that year would be £240,054,835.

These figures, however, fall short of the full amount of private wealth, as the values sworn to do not include those estates on which no stamp duty is payable—viz., land and goods passing to the husband or wife of the deceased, and a great number of properties under £100. The aggregate value of such estates must be considerable, and should give a substantial increase to the average amount per head, and therefore to the total wealth. But, on the other hand, less than 35 per cent. of the deaths in 1902 were of persons under twenty years of age, and the census of 1901 showed that 44 per cent. of the population living at that time were under twenty: so that, in assuming the average wealth per head of the living to be the same as the average left by each one dying, the aggregate is somewhat unduly swelled, because, as a rule, persons under twenty have little or no property.

The estimated private wealth for each of the last ten years is shown by the following figures:—

Year.	Amount. £	Average per Head. £
1893	156,058,273	232
1894	154,715,821	225
1895	152,918,021	219
1896	170,007,843	238
1897	183,781,780	252
1898	201,154,323	271
1899	217,587,481	288
1900	228,236,158	296
1901	229,587,916	291
1902	240,054,835	297

Of the total amount of private wealth given above for 1902—viz., £240,054,835—about £130,000,000 would be the value of real estate privately owned, subtracting which leaves, approximately, £110,000,000 as representing personal property. Although this may appear a high estimate, a very large development in the taxable personal estate during the last ten years is absolutely demonstrated by the returns showing the amounts of income-tax paid, which rose from £67,367 in 1892–93 to £200,684 in 1902–1903.

The Government Statistician of New South Wales estimated the private wealth of Australasia for the year 1901 at £1,083,838,000, an average of £240 per inhabitant; and the same authority has returned the private wealth for the State of New South Wales as £358,934,000 sterling for the year 1901.

An attempt to arrive at the value of the public property (exclusive of lessees' interests in land and improvements) in the colony, with the assistance of the Valuer-General, has led to the following result:—

PUBLIC PROPERTY.

Public property—*i.e.*, land and improvements not owned by individuals, exclusive of Government railways:—

	£	£
Crown lands	15,303,184	
Local authorities' lands	4,319,539	
Educational lands	3,181,739	
Church and other lands	2,249,378	
		25,053,840
Government railways, open and under construction, 31st March, 1902		19,606,248
Other public works—viz., telegraphs, lighthouses, harbours, and water-supply on goldfields		4,810,399
Total public property		£49,470,487

This amount of £49,470,487, with the sum of £240,054,835 previously shown as the private wealth, estimated from probate

returns, gives a total of £289,525,322. If to this be added £7,490,521, the value of Native lands with their improvements (exclusive of lessees' interests), a final total of £297,015,843 is reached.

So much of this sum as represents private wealth may be considered as *net* wealth, because stamp duty is paid after subtracting liabilities on estates. But the debt of the General Government and that of the local bodies (so far as raised abroad) must be deducted. These amounts were, in the year 1902, £46,611,726 and £5,552,100 respectively. Allowing for these, it is found that the colony had in 1902 at least £244,852,017 value of public and private wealth. No doubt there is more, but full information as to public wealth other than property owned by the Government is not procurable.

Earnings and Income.

The amount of the aggregate annual earnings of the people of New Zealand is given in the Year-book of 1897 (p. 283). To arrive at this estimate the method adopted was to allot to each person the probable income earned in respect of the occupation set down against his or her name in the household schedules collected at the census of 12th April, 1896. Exception may no doubt be taken to the plan of basing a calculation on a series of arbitrary assumptions, but there is precedent for such a course. The results of the calculation were given without any guarantee of accuracy, similar figures having been called for in the past. Indeed, it is important to make clear that the figures must only be considered as put forward with the greatest diffidence, and rather of necessity than otherwise. They may, indeed, give a fair idea of the facts, but the responsibility of using them for any particular purpose is not accepted by the Registrar-General.

Wages.

The aggregate of wages paid in the colony for the year 1896, as given in the Year-book of 1897 (p. 284), was arrived at by assigning to each wage-earner the probable annual income each would derive from the profession or occupation followed. As in the case of income, the calculations made were put forward merely by way of an attempt to get as closely as possible to the facts, and because asked for; but no assurance whatever can be given as to the exactness of the conclusions stated, and the Registrar-General does not accept any responsibility in regard to their use.

Cost of Living.

An estimate was made in 1894 of the cost of living in New Zealand, including, besides what was spent on necessaries, the additional outlay on what may be termed luxuries, and on things of occasional necessity. The rate arrived at per head of population was £35 6s. 1d. per annum for that year. Fuller particulars are given in former issues of the Year-book.

The average income per head, previously referred to, was believed to be from £37 12s. to £44 per annum.

Mr. Mulhall, in his "Dictionary of Statistics," gives the average expenditure per head of population for certain specified countries as follows:—

Country.	Average Annual Expenditure per Head. £ s. d.	Country.	Average Annual Expenditure per Head. £ s. d.
United Kingdom ..	29 14 9	Norway	19 0 0
France	23 19 4	Denmark	28 11 5
Germany	20 3 4	Holland	20 17 4
Russia	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland ..	18 0 0
Italy	11 11 0	United States ..	32 16 2
Spain	15 12 6	Canada	23 2 2
Portugal	11 5 6	Argentina ..	27 9 1
Sweden	20 8 4		

The estimate for Australia, made by the Government Statistician of New South Wales, for the present time is £38 per head.

Annual Consumption of Food, Stimulants, etc.

The quantities used per head of population in New Zealand of some of the main articles of consumption will be found in the Year-book for 1898. The figures are averages for five years.

Prices and Wages.

The average prices of produce, live-stock, provisions, &c., in each provincial district are given for the year 1902 in tabular form on pages 463 and 464. While the variations for the different districts are such as to render it in most cases inadvisable to show averages for the colony, this has nevertheless been done for the staples of food —*i.e.*, bread, meat, and milk—also for tea and sugar, which may almost be called necessaries. Averages for the colony, taken out for the years 1878, 1888, 1898, and 1902, indicate in some cases a decline in prices with the advance of time. In striking these, prices on the goldfields have not been taken into account:—

—		1878.	1888.	1898.	1902.
		s. d.	s. d.	s. d.	s. d.
Bread	per lb.	0 2	0 1¾	0 1½	0 1¾
Beef	per lb.	0 5½	0 3¾	0 3¾	0 5
Mutton	per lb.	0 3¾	0 3¼	0 3	0 4½
Sugar	per lb.	0 5	0 3¼	0 2¾	0 2¾
Tea	per lb.	2 9	2 3½	1 10	1 9
Butter (fresh) ..	per lb.	1 4	0 9¼	0 9¾	1 0
Cheese (colonial) ..	per lb.	0 10	0 6	0 5½	0 7
Milk	per quart.	0 4½	0 3¼	0 3	0 3½

Rates of Wages.

The average rates of wages paid in 1902 in each provincial district for agricultural, pastoral, artisan, and servants' labour are given on pages 465 to 467.

AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC., IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1902.

Produce, &c.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
I. AGRICULTURAL PRODUCE.									
Wheat .. .. per bushel (60lb.)	4/6 to 5/	4/ to 5/6	5/ to 5/6	5/3 to 6/	4/6	5/2 to 5/6	4/6 to 6/	5/ to 5/6	4/ to 6/
Barley .. .. per bushel (47lb.)	4/ to 4/6	3/6	3/ to 3/6	3/3 to 4/6	3/6	4/6	4/ to 5/	3/ to 3/9	3/ to 4/
Oats .. .. per bushel (40lb.)	3/3 to 3/9	3/6 to 3/9	2/9 to 4/	2/9 to 4/	4/	3/3	3/ to 3/9	2/6 to 3/	2/2 to 3/
Maize .. .. per bushel (56lb.)	4/ to 5/	4/ to 6/	4/ to 5/	4/ to 6/	4/6	5/3	..	5/ to 6/	2/3 to 5/6
Bran .. .. per bushel (20lb.)	1/4 to 2/3	1/6	1/6 to 2/6	1/3 to 2/6	£7/10*	1/9 to 2/	1/6 to 1/10	1/3 to 2/	1/ to 1/6
Hay .. .. per ton ..	£4 to £5	£4/10 to £5	£3/10 to £4	£3/5 to £5/10	£4	£4 to £6	£5 to £6	£3 to £4/10	52/6 to 100/
II. FLOUR AND BREAD.									
Flour, wholesale .. per ton of 2,000lb.	£11/10 to £15	190/ to 250/	£10 to £15	250/ to 330/	£12/10	280/ to 290/	280/ to 290/	240/ to 290/	£11 to £14
Flour, retail .. per bag of 50lb. ..	6/9 to 8/	6/ to 8/	6/6 to 8/6	7/6 to 8/6	7/	7/6 to 8/6	7/6 to 8/	7/3 to 9/	6/6 to 7/6
Bread .. .. per 4lb. loaf ..	7d. to 8d.	8d.	7d. to 8d.	7d. to 8d.	8d.	8d.	8d. to 9d.	7d. to 8d.	6½d. to 8d.
III. LIVE-STOCK AND MEAT.									
Horses, draught .. per head ..	£20 to £40	£30 to £35	£25 to £40	£35 to £45	£20 to £45	£30 to £40	£45 to £60	£25 to £45	£25 to £50
Horses, saddle and harness .. per head ..	£7 to £15	£15 to £20	£10 to £25	£10 to £25	£10 to £35	£18 to £20	£10 to £20	£15 to £30	£10 to £30
Cattle, fat .. per head ..	£7 to £11	£6 to £8	£9 to £10	£8 to £12	25/†	150/ to 240/	£12 to £19	£8 to £12	£7 to £13
Cattle, milch cows .. per head ..	£6 to £7/10	£5 to £9	£6 to £10	£7 to £10	£7/10	£8 to £9	£6 to £10	£7 to £9	£6 to £10
Sheep, fat .. .. per head ..	13/ to 17/	12/ to 15/	13/ to 15/	12/6 to 18/	16/	13/ to 16/6	16/ to £1	15/6 to £1	14/ to £1
Lambs, fat .. per head ..	10/ to 11/	10/6	10/ to 11/6	10/ to 15/	12/	11/ to 14/	10/ to 15/	12/ to 16/	10/ to 15/
Butchers' meat:—									
Beef .. .. per lb.	5d. to 7d.	5d.	4½d. to 6d.	4½d. to 7d.	4½d. to 6d.	6d. to 8d.	6d. to 7d.	4d. to 8d.	4d. to 8d.
Mutton .. .. per lb.	3½d. to 7d.	4d. to 5d.	3d. to 4½d.	4½d. to 6d.	5d. to 6d.	5d. to 6d.	5d. to 7d.	3½d. to 6d.	4d. to 6d.
Veal .. .. per lb.	4d. to 6d.	4d. to 5d.	5d. to 5½d.	4½d. to 7d.	6d.	5d. to 6d.	6d. to 7d.	5d. to 6d.	5d. to 10d.
Pork .. .. per lb.	5d. to 7d.	5d. to 6d.	5d. to 6d.	6d. to 8d.	6d.	6d. to 8d.	6d. to 8d.	6d. to 7d.	6d. to 9d.
Lamb .. .. per lb.	5d. to 7d.	5½d. to 6d.	5½d. to 7d.	6d. to 9d.	3/6 to 4/ per qr.	6d. to 9d.	6d. to 9d.	5d. to 7d.	5d. to 8d.
IV. DAIRY PRODUCE.									
Butter, fresh .. per lb.	11d. to 1/3	11d. to 1/	7d. to 1/	8d. to 1/	1/1	9d. to 1/2	10d. to 1/	9d. to 1/	7d. to 1/1
Butter, salt .. per lb.	7d. to 10d.	10d.	8d. to 10d.	8d. to 9d.	9d.	7d. to 9d.	9d. to 1/	7d. to 10d.	7½d. to 1/
Cheese, colonial .. per lb. ..	6½d. to 8d.	6d. to 7d.	8d. to 10d.	5½d. to 8d.	7d.	7d.	7d. to 8d.	7d. to 8½.	5½d. to 8d.
Cheese, imported .. per lb.	7d. to 1/	1/4	1/ to 2/3	1/6 to 2/6	2/	2/6	10d.	1/2 to 1/8	9d. to 1/6
Milk .. .. per quart ..	3d. to 4d.	3d.	3d. to 4d.	3d. to 4d.	3d.	4d. to 5d.	4d. to 5d.	3d. to 4d.	2½d. to 6d.

* Per ton. † Per 100lb.

AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC., IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1902.
—*continued.*

Produce, &c.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
V. FARM-YARD PRODUCE.									
Geese .. .. per pair ..	6/ to 9/	7/ to 8/	7/ to 10/	6/ to 10/	5/6	4/6 to 8/	8/ to 12/6	4/3 to 6/	5/ to 11/6
Ducks .. .. per pair ..	3/ to 5/	5/	3/9 to 5/	4/ to 6/6	4/	5/ to 5/6	5/ to 7/	3/6 to 5/6	2/6 to 6/6
Fowls .. .. per pair ..	2/6 to 4/	3/6 to 4/6	2/6 to 4/	3/6 to 5/	2/6	3/6 to 4/	4/ to 5/	3/ to 3/6	2/ to 4/
Turkeys .. .. per head ..	4/ to 8/	5/ to 5/6	5/ to 9/	4/ to 10/	5/	7/	5/ to 15/	4/ to 10/	5/ to 14/
Bacon .. .. per lb. ..	8d. to 10d.	9d.	9d. to 1/1	8½d. to 1/2	9d.	9d. to 11d.	10d. to 11d.	6d. to 11d.	6d. to 10d.
Ham .. .. per lb. ..	8½d. to 1/	10½d. to 11d.	10d. to 1/1	9d. to 1/3	11d.	10d. to 11d.	10½d. to 1/	8d. to 11d.	8d. to 11d.
Eggs .. .. per doz. ..	10d. to 1/2	10d. to 1/1	1/ to 1/3	9d. to 1/6	1/2	11d. to 1/6	1/6	9d. to 1/2	8d. to 1/4
VI. GARDEN PRODUCE.									
Potatoes, wholesale per ton ..	100/ to 220/	80/ to 170/	90/ to 210/	70/ to 180/	140/	120/ to 160/	160/ to 240/	85/ to 200/	70/ to 300/
Potatoes, retail .. per cwt. ..	6/3 to 14/	6/ to 9/	10/ to 12/6	5/ to 11/	8/	9/ to 10/	9/ to 14/	7/6 to 13/6	4/6 to 15/
Onions .. .. per lb. ..	1d. to 3d.	1½d. to 3d.	1½d. to 2d.	1½d. to 3d.	1d.	1½d. to 1⅝d.	1d. to 2d.	1d. to 2d.	1d. to 3d.
Carrots .. .. per doz. bnchs.	1/ to 2/	1/ to 3/	1/ to 3/	1/	6d.	2/ to 2/6	1/6 to 3/	1/3 to 3/	1/ to 6/
Turnips .. .. per doz. bnchs.	1/ to 2/	1/ to 2/	1/ to 3/	1/	6d.	2/ to 2/6	2/ to 3/	1/3 to 3/	1/ to 6/
Cabbages .. per doz. ..	1/6 to 3/	3/3 to 4/	2/ to 3/	1/ to 3/	1/	2/6 to 3/	3/ to 3/6	1/ to 3/	1/ to 6/
VII. MISCELLANEOUS ARTICLES.									
Tea .. .. per lb. ..	1/4 to 2/	1/9 to 2/	1/9 to 2/6	1/2 to 2/6	2/	1/10 to 2/	1/8 to 2/	1/3 to 2/6	1/3 to 2/4
Coffee .. .. per lb. ..	1/3 to 1/11	1/8	1/6 to 2/	1/6 to 2/	2/	1/9 to 1/10	1/9 to 2/	1/3 to 1/8	1/6 to 2/
Sugar .. .. per lb. ..	2d. to 3d.	2½d. to 3d.	2½d. to 3d.	2½d. to 3d.	3d.	3d.	3d.	2½d.	2½d. to 3d.
Rice .. .. per lb. ..	2½d. to 3d.	2½d. to 3d.	2½d. to 3d.	2d. to 3d.	3d.	3d.	3d.	2d. to 2½d.	1½d. to 3d.
Salt .. .. per lb. ..	1d.	1d.	1d.	1d.	1d.	1d.	1d.	1d.	1d.
Soap .. .. per cwt. ..	13/6 to 23/	20/ to 32/6	13/ to 26/	11/ to 25/	21/	9/ to 27/	12/ to 25/	10/ to 20/	12/ to 24/
Candles .. per lb. ..	6d. to 8d.	7d.	5d. to 9d.	7d. to 8d.	7d.	7d. to 8d.	6d. to 8d.	5d. to 7d.	5d. to 8d.
Tobacco .. per lb. ..	5/3 to 5/9	5/6 to 6/	5/3 to 6/	5/3 to 6/	5/3	5/6	5/ to 5/6	5/ to 6/	5/ to 6/6
Coal .. .. per ton ..	26/ to 55/	40/	35/6 to 52/6	38/ to 50/	40/	22/6 to 40/	22/ to 36/	36/ to 52/	18/ to 39/6
Firewood .. per cord ..	20/ to 30/	19/ to 25/	18/ to 32/	18/ to 36/	30/	28/ to 30/	16/ to 30/	28/ to 40/	18/ to 50/
VIII. BEER, WINES, SPIRITS.									
Beer, colonial .. per hhd. ..	80/ to 92/	80/ to 90/	90/ to 110/	80/ to 100/	80/	85/ to 100/	80/ to 95/	80/ to 108/	60/ to 120/
Beer, English, bottl'd per doz. qts. ..	12/ to 15/	15/ to 16/	14/6 to 15/6	14/6 to 17/	14/	14/ to 15/	15/ to 16/	12/6 to 18/	13/6 to 18/
Brandy .. .. per gallon ..	25/ to 30/	30/ to 35/	28/6 to 30/	26/ to 34/	30/	26/ to 32/	22/ to 25/	25/6 to 30/	25/ to 28/
Rum .. .. per gallon ..	22/6 to 27/	28/	26/ to 30/	24/6 to 32/6	27/6	24/6 to 25/	22/ to 25/	23/ to 30/	23/ to 33/
Whisky .. .. per gallon ..	24/ to 30/	27/6 to 30/	30/ to 35/	28/ to 32/6	30/	25/ to 28/	22/ to 25/	25/ to 28/6	24/ to 28/
Gin .. .. per gallon ..	20/ to 24/	22/ to 24/	17/6 to 27/6	20/ to 26/	27/6	25/ to 28/	18/ to 20/	22/ to 28/6	20/ to 30/
Wine, Australian .. per gallon ..	15/ to 22/6	18/ to 20/	16/ to 22/6	14/ to 30/	16/	14/	13/6 to 17/	15/ to 20/	14/ to 21/
Wine, European .. per gallon ..	17/ to 25/	30/	20/ to 27/6	22/ to 40/	20/	21/	12/6 to 20/	20/ to 25/	16/ to 30/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1902.

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
1. AGRICULTURAL LABOUR.									
Farm-labourers:									
With board, per week	15/ to 22/	15/ to 25/	20/ to 25/	20/ to 25/	20/	20/	20/ to 30/	15/ to 25/	15/ to 20/
Without board, per day	6/ to 7/	7/ to 8/	..	..	..	7/	..	6/ to 7/6	6/ to 8/
Ploughmen:									
With board, per week	20/ to 25/	15/ to 25/	20/ to 25/	20/ to 30/	25/	20/	25/ to 30/	20/ to 27/6	20/ to 25/
Without board, per day	7/	7/ to 8/	..	..	..	7/	..	..	..
Harvesters:									
With board, per week	25/ to 48/	40/	20/	20/ to 30/	30/ to 35/	40/	..	40/ to 50/	25/ to 40/
Without board, per day	10/	1/ to 1/3 per hour	1/ per hour	1/ to 1/3 per hour	8/	12/	..	1/ per hour	9d. to 1/ per hour
Men-cooks on farms:									
With board, per week	25/ to 40/	20/ to 25/	20/ to 30/	15/ to 30/	25/	30/	..	20/ to 40/	20/ to 40/
Female farm-servants:									
With board, per week	10/ to 15/	8/ to 15/	10/ to 20/	12/6 to 20/	12/	10/	..	10/ to 15/	8/ to 20/
2. PASTORAL LABOUR.									
Shepherds, with board, per annum ..	£50 to £70	£50 to £65	£58/10 to £78	£50 to £78	£65 to £78	£70	..	£52 to £80	£52 to £70
Stock-keepers, with board, per annum ..	£50 to £70	£50 to £65	£58/10 to £78	£50 to £78	£50 to £65	£70	..	£60	£50 to £70
Station-labourers:									
With board, per week	20/ to 25/	15/ to 25/	17/6 to 25/	20/ to 30/	20/ to 25/	20/	..	15/ to 20/	15/ to 20/
Without board, per day	7/	8/	7/	..	..	..	..	..	..
Shearers, with board, per 100 sheep shorn	17/6 to 20/	16/8 to 20/	17/6 to 20/	16/8 to 20/	16/8	16/8	..	16/6 to 20/	16/8 to 20/
Men-cooks on stations, with board, per week	20/ to 27/6	20/ to 25/	20/ to 30/	20/ to 40/	30/ to 40/	25/	..	20/ to 30/	20/ to 30/
3. ARTISAN LABOUR (per day, without board).									
Masons	10/ to 14/	9/ to 10/	11/ to 14/	10/ to 12/6	14/	12/	14/	10/ to 12/	10/ to 12/
Plasterers	10/ to 14/	9/ to 10/	12/ to 14/	10/ to 14/	14/	12/	12/6 to 15/	10/ to 12/	10/ to 14/
Bricklayers	9/ to 14/	9/ to 12/	11/ to 14/	10/ to 14/	14/	12/	10/ to 14/	12/	12/ to 14/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1902—*continued.*

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
3. ARTISAN LABOUR (per day, without board)—*continued.*									
Carpenters	9/ to 11/6	10/ to 12/	8/ to 10/	10/ to 12/	9/	9/ to 11/	10/ to 12/6	10/ to 12/	8/ to 12/
Smiths	8/ to 10/	8/ to 9/	8/ to 12/	7/ to 12/	10/	10/ to 11/	10/	9/ to 10/	7/ to 12/
Shipwrights	10/ to 11/	8/ to 10/	12/	10/ to 12/	..	10/ to 12/	10/	10/ to 12/	9/ to 12/
Plumbers	8/ to 12/	10/	8/ to 11/	9/ to 12/	10/	10/	10/ to 13/	9/ to 10/6	9/ to 12/
Painters	7/6 to 12/	8/ to 10/	8/ to 12/	9/ to 12/	9/	8/ to 11/	8/ to 10/	8/ to 10/6	7/ to 12/
Saddlers	8/6 to 10/	7/ to 9/	8/ to 10/	7/ to 10/	8/	8/ to 9/	8/ to 10/	8/ to 8/6	8/ to 10/
Shoemakers	7/6 to 8/	7/ to 8/	7/6 to 8/6	7/ to 10/	8/	8/ to 10/	8/6 to 10/	7/ to 8/	6/ to 10/
Coopers	9/ to 10/	7/ to 10/6	8/ to 10/	8/ to 11/	9/	12/	10/ to 12/	10/ to 10/6	8/ to 10/
Watchmakers	9/6 to 11/	7/ to 8/	8/ to 10/	7/ to 12/	10/	8/	9/ to 12/	7/ to 9/	8/ to 10/
Wheelwrights	10/ to 11/	8/ to 10/	8/ to 10/	7/ to 12/	10/	10/ to 11/	10/ to 12/	10/ to 12/	9/ to 12/
4. SERVANTS.									
Married couples without family, with board, per annum	£60 to £80	£80 to £85	£80 to £90	£60 to £80	£70 to £80	£75	..	£65 to £75	£52 to £80
Married couples with family, with board, per annum	£55 to £85	..	£80	£52 to £80	£65 to £75	£70	..	£60 to £70	£50 to £80
Grooms, with board, per week ..	15/ to 25/	15/ to 25/	20/ to 30/	20/ to 25/	20/	25/	20/ to 30/	20/ to 25/	15/ to 25/
Gardeners:									
With board, per week	20/ to 25/	25/ to 30/	20/ to 25/	20/ to 35/	25/ to 35/	25/	20/	20/ to 30/	20/ to 30/
Without board, per day	5/	7/ to 8/	..	8/	7/ to 8/	8/	8/ to 10/	8/	7/ to 8/
Cooks, with board, per week	15/ to 25/	20/ to 30/	15/ to 25/	15/ to 35/	15/ to 20/	15/ to 20/	15/ to 40/	15/ to 20/	15/ to 30/
Laundresses, with board, per week ..	12/ to 20/	15/ to 30/	10/ to 17/6	15/ to 25/	10/ to 15/	10/ to 15/	15/ to 20/	12/ to 20/	12/ to 20/
General house servants, with board, per week	8/ to 15/	8/ to 12/	10/ to 15/	8/ to 20/	10/ to 12/	8/ to 10/	10/ to 15/	10/ to 12/6	10/ to 15/
Housemaids, with board, per week ..	7/ to 15/	10/ to 12/	10/ to 15/	8/ to 20/	10/ to 12/	8/ to 17/6	10/ to 15/	9/ to 12/6	8/ to 15/
Nursemaids, with board, per week ..	5/ to 10/	4/ to 5/	5/ to 7/6	7/ to 15/	5/ to 8/	6/ to 7/	6/ to 8/	5/ to 10/	5/ to 10/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1902—*continued.*

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marl-b'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
4. SERVANTS—*continued.*									
Needlewomen:									
With board, per week	15/ to 21/	30/ to 35/	21/	14/ to 20/	..	15/	..	15/	10/ to 20/
Without board, per day (lunch always provided)	2/6 to 4/	3/ to 3/6	3/6 to 4/	3/6 to 5/	3/	3/	3/ to 6/	3/6 to 5/	3/ to 6/
5. MISCELLANEOUS.									
General labourers, without board, per day	5/ to 8/6	7/ to 8/	6/ to 8/	7/ to 9/	6/ to 8/	7/ to 9/	9/ to 10/	6/ to 7/6	6/ to 8/
Stonebreakers without board, per cubic yard	2/3 to 6/	3/6 to 3/9	2/	2/6 to 5/	3/	1/	3/6 to 5/	2/6 to 4/	1/7½ to 5/
Seamen, with board, per month	£4 to £6	£5 to £6	£6 10s.	£5 to £7	..	£6	..	£4 to £8	£5 to £6
Miners, without board, per day	7/6 to 10/	8/	..	9/	9/	9/ to 11/	9/ to 10/	8/6	7/ to 12/
Engine-drivers, " "	9/ to 10/	9/ to 10/	8/ to 10/	10/ to 12/	10/	10/ to 12/	10/ to 12/	10/ to 14/	8/ to 15/
Tailors, " "	8/ to 10/	7/ to 10/	6/8 to 15/	6/8 to 10/	8/–10/	7/6 to 10/	7/6 to 10/	8/ to 10/	6/8 to 10/
Tailoresses, " per week	12/ to 27/	20/ to 30/	25/ to 40/	25/ to 40/	..	20/ to 36/	24/ to 30/	17/6 to 30/	18/ to 30/
Dressmakers, " "	17/6 to 24/	36/ to 48/	20/ to 50/	10/ to 40/	..	20/ to 45/	21/ to 40/	18/ to 25/	20/ to 40/
Milliners, " "	27/ to 36/	30/ to 36/	25/ to 60/	12/6 to 60/	40/–50/	24/ to 45/	25/ to 50/	21/ to 50/	20/ to 48/
Machinists, " "	20/ to 30/	30/ to 36/	20/ to 30/	20/ to 30/	20/–25/	24/ to 30/	20/ to 30/	20/ to 30/	20/ to 36/
Storekeepers, " "	27/6 to 60/	40/ to 55/	60/	50/ to 60/	..	50/	50/ to 60/	50/ to 60/	45/ to 65/
" assistants, " "	25/ to 48/	25/ to 42/	30/ to 45/	45/ to 60/	40/–50/	40/ to 48/	40/ to 50/	40/ to 48/	35/ to 50/
Drapers' assistants, " "	25/ to 48/	45/ to 60/	50/ to 60/	45/ to 65/	40/–60/	40/ to 50/	30/ to 60/	25/ to 60/	40/ to 60/
Grocers' assistants, " "	25/ to 48/	36/ to 55/	40/ to 55/	35/ to 55/	35/–42/	40/ to 48/	50/	35/ to 60/	35/ to 48/
Butchers, " "	20/ to 60/	30/ to 60/	40/ to 50/	40/ to 60/	45/	40/ to 50/	40/ to 60/	35/ to 54/	25/ to 55/
Bakers, " "	40/ to 60/	36/ to 50/	20/ to 55/	40/ to 60/	55/	45/ to 50/	42/ to 60/	35/ to 60/	25/ to 55/
Storemen, " "	40/ to 50/	40/ to 48/	40/ to 60/	40/ to 55/	50/	50/	50/ to 60/	40/ to 50/	45/ to 50/
Compositors, " "	36/ to 60/	36/ to 60/	42/ to 50/	30/ to 70/	50/	40/ to 50/	40/ to 60/	50/ to 60/	40/ to 70/

Labour Legislation.

The legislation passed by the General Assembly of New Zealand and termed the "labour laws" comprises the undermentioned statutes and regulations made under various Acts:—

"The Accidents Compensation Act, 1901."
"The Alcoholic Liquors Sale Control Act Amendment Act, 1895": Section 10.
Bankruptcy: Sections 112 and 120 of Act of 1892.
"The Coal-mines Act, 1891": Sections 18 to 58 and 64 to 88.
"The Coal-mines Act Amendment Act, 1901": Sections 3, 4, and 6.
"The Companies Acts Amendment Act, 1893": Sections 8 and 9.
"The Conspiracy Law Amendment Act, 1894."
"The Contractors' and Workmen's Lien Act, 1892."
"The Criminal Code Act, 1893": Sections 150 and 213.
"The Deaths by Accidents Compensation Act, 1880."
"The Electoral Act Amendment Act, 1900": Section 10.
"The Employers' Liability Act, 1882," with amendments of 1891 and 1892.
"The Factories Act, 1901," with amendments of 1902.
"The Industrial Conciliation and Arbitration Act, 1900," with amendments of 1901.
"The Inspection of Machinery Act, 1902."
"The Kauri-gum Industry Act, 1898," and Amendment Acts of 1899 and 1902.
"The Labour Day Act, 1899."
"The Land for Settlements Act Amendment Act, 1896" (provision for workmen's homes).
"The Legitimation Act, 1894": Section 6.
"The Licensing Act, 1881": Section 131.
"The Master and Apprentice Act, 1865." Master and Apprentice: Extract from "The Criminal Code Act, 1893," sections 150 and 213.
"The Mining Act, 1898," and Amendment Acts, 1900, 1901, and 1902.
"The Public Contracts Act, 1900."
"The Servants' Registry Offices Act, 1895."
"The Shearers' Accommodation Act, 1898."
"The Shipping and Seamen's Act, 1877," with Amendment Acts of 1885, 1890, 1894, 1895, 1896, and 1899.
"The Shops and Shop-assistants Act, 1894," with Amendment Acts of 1895, 1896, and 1901.
"The Sunday Labour in Mines Prevention Act, 1897."
"The Threshing-machine Owners' Lien Act, 1895."
"The Trade-Union Act, 1878," and Amendment Act, 1896.
"The Truck Act, 1891."
"The Wages Attachment Act, 1895."
"The Wages Protection Act, 1899" (forming part of and to be read with "The Truck Act, 1891").
"The Workers' Compensation for Accidents Act, 1900," with amendments of 1902.
"The Workmen's Wages Act, 1893."

The labour laws have been passed in the effort to regulate certain conditions affecting employer and employed. Their scope embraces many difficult positions into which the exigencies of modern industrial life have forced those engaged in trades and handicrafts. The general tendency of these laws is to ameliorate the position of the worker by preventing social oppression through undue influences, or through unsatisfactory conditions of sanitation. It will undoubtedly be found that, with the advance of time, these laws are capable of improvement and amendment; but they have already done much to make the lives of operatives of fuller and more healthy growth, and their aim is to prevent the installation of abuses before such abuses attain formidable dimensions.

The manufacturing population in New Zealand differs from that in some of the Australian States by its wide dispersion. The capital city has hitherto been unable to draw to itself the industrial ability of the other provincial centres; and not only do Auckland, Christchurch, and Dunedin vie with Wellington as centres of population, but also as *nuclei* of commercial activity. In the second-class towns, such as Nelson, Napier, Invercargill, &c., many important works are being carried on, while even in the villages and rural districts the progress of new settlement necessitates the manufacture of articles which in older communities are produced in specialised localities. Men scattered widely at the numerous occupations of colonial country life, shearing, harvesting, bush-felling, road-making, or sailing coastal vessels, &c., require legal protection against the dangers and disabilities to which their callings expose them. This general dispersion of industry necessitates not only a wide system of supervision, but legislative measures of a peculiar character, at once sufficiently elastic to comprehend many varieties of function, and yet rigid to crush any apparent abuse.

The most important of these laws, in its general significance, is that dealing with compulsory arbitration in labour disputes. "The Industrial Conciliation and Arbitration Act, 1894" (with its amending Acts of 1895, 1896, and 1898), were consolidated and further amended by the Acts of 1900 and 1901, now in force, and which are for the purpose of encouraging industrial association, and to facilitate the settlement of trade difficulties. Societies consisting of two or more employers, or of seven or more workers, may be registered and become subject to the jurisdiction of the Board and Court appointed by the Act of 1900. Any such society, after complying with stated conditions, may bring a disputed case before the Board of Conciliation appointed for that industrial district, and, if the Board fails to effect a settlement, the dispute may be referred to the Court of Arbitration, whose award may be enforced in the same manner as an award of the Supreme Court. The amending Act of 1901 gives the right to either party to a trade dispute to refer the matter directly to the Arbitration Court. The amount for which such an award may be enforced against an association is limited to £500.

"The Factories Act, 1901," is a consolidation of previous legislation, with some important amendments. New Zealand has been divided into factory districts under the charge of a Chief Inspector and 150 local Inspectors. As a "factory" or "work-room" includes any place in which two or more persons are engaged in working for hire or reward in any handicraft, there are few operatives who do not come within the scope of the Act. Children under fourteen years of age are not allowed to be employed, and the hours of labour, holidays, &c., of women and youths under sixteen are strictly regulated. Good ventilation, sanitary accommodation, and general cleanliness of buildings are points dwelt upon; while machinery has to be properly guarded, fire-escapes provided, and dangerous occupations especially classified. In order to assist the system of free general education which prevails in the colony, young persons are not allowed to work in factories till they have passed the Fourth Standard of the State schools, or an equivalent examination. To prevent the introduction of "sweating" into our commercial centres, articles made, or partly made, in private dwellings, or unregistered workshops, have to be labelled when offered for sale, so that goods so manufactured (often in unsanitary premises) may not be placed in the market in competition with work done in properly inspected factories. Any person removing such labels is liable to a heavy fine. The Factory Inspectors also exercise supervision over the sleeping accommodation provided for shearers in country districts. As the sheep-runs and farms are widely scattered, sometimes in the rough and remote back country, this part of the work of inspection is no easy task. A woman Inspector of Factories also gives her assistance to the duties of the Department, travelling from place to place, and particularly looking into the condition of the operative women and girls. There is an amendment Act, passed in 1902, relative to the granting of overtime permits, the minimum wages of persons under twenty years of age, and the health of persons working in the manufacture of textile fabrics.

The duration of the hours of business in shops is limited by "The Shops and Shop-assistants Act, 1894," and the Shops and Shop-assistants Act Amendment Acts, 1895, 1896, and 1901. These provide for the closing of all shops in towns and boroughs for one afternoon half-holiday in each week. A few shops, such as those of fishmongers, fruiterers, eating-house keepers, &c., are exempted from the general closing on account of their convenience to the public; but assistants in such establishments, in the bars of hotels, and in country stores, must have a half-holiday on some day of the week. Very small shops carried on by Europeans without paid assistants are also exempt from closing on the general half-holiday, but must close on one afternoon in each week. The hours of work for women and young persons are defined; sitting accommodation must be provided, and precautions as to the necessary time for meals, sanitary accommodation, &c., are enforced; the Act also enumerates the working-hours, holidays, &c., of clerks employed in banks, mercantile offices, &c.

"The Employers' Liability Act, 1882," added to and amended in 1891 and 1892, is designed to protect workmen from negligence on the part of employers, by defining under what circumstances compensation for injury or death may be recoverable. The Act covers all employments except that of domestic servant, and does not allow of any "contracting out" by agreement on the part of employer and employed. Another Act of this character has regard to the payment of workmen's wages, and states that if a workman shall demand payment of wages twenty-four hours or more after they are due, and the contractor does not pay such wages, the workman may legally attach all moneys due to the contractor by the employer until such wages are paid. "The Truck Act, 1891," requires that payment of wages shall not be made in goods or "truck," but in money, any contra account notwithstanding; but there are a few exemptions, such as for advances for food, tools, &c., to men engaged in felling bush. In order to minimise the number of cases wherein fraudulent or unfortunate contractors victimised their labourers, "The Contractors' and Workmen's Lien Act, 1892," was brought into existence. This entitles a person who has done work upon any land, building, or chattel to a lien upon such property. The lien is only to be exercised under certain restrictions, and for a limited amount, but it gives priority of claim for wages against other service, and enables legal proceedings for recovery to be taken before the attached property can be disposed of or alienated.

"The Workers' Compensation for Accidents Act, 1900," will probably almost altogether supersede the Employers' Liability Act, because, while an accident to a workman had not to be compensated by an employer under the latter Act unless it had occurred through his carelessness or that of his agent, under the former all accidents are to be compensated unless they are caused by the serious and wilful misconduct of the person injured. To meet the difficulty of too great expense falling on an employer through his having to pay large accident compensation, "The Government Accident Insurance Act, 1899," was passed, which insures employers against risk of paying compensation. "The Workers' Compensation for Accidents Act Amendment Act, 1902," extends the application of the principal Act to workers in all branches of agriculture, and reduces the term during which the employer is not liable to pay for accident from two weeks to one week.

"The Accidents Compensation Act, 1901," provides that an independent medical examination of the injured person may be ordered by the Judge before whom a claim of compensation for accident is brought.

"The Servants' Registry Offices Act, 1895," regulates the licensing of registry offices for domestic or farm servants. It prevents friendless or uneducated people from becoming the prey of unscrupulous persons; who formerly collected fees by duping the applicants for situations. The registry-office keepers have to pay a licensing fee to the Government, and to present a certificate of good character when applying for a license. Proper ledgers and books open to inspection must be provided, and the lending or hiring of licenses is not permitted. Registry-office keepers are not allowed to keep lodging-houses for servants, or have any interest in such houses.

There are sundry Acts for the supervision of shipping, and the protection of sailors and passengers. They relate to the appointment of pilots and ships' officers; the engagement and discharge of sailors; the sanitation, ventilation, and overloading of vessels; and the number of duly rated hands engaged in proportion to tonnage. They endeavour to prevent injustice to the sailor as to advance-notes, or payments in foreign money, and also specify penalties to be inflicted for desertion, disobedience, &c.

Combinations or associations of persons for regulating the relations between masters and masters, or masters and workmen, or workmen and workmen, are directed by "The Trade Union Act, 1878." In this Act the different statutes which do not apply to trade-unions (such as the Joint Stock Act, the Friendly Societies Act, &c.) are enumerated, and the manner in which such societies may register, hold property, &c., is set out, together with the necessary provisions as to returns, penalties, &c. [An Amendment Act was passed in 1896, altering the age of membership.] "The Conspiracy Law Amendment Act, 1894," permits any combination of persons in furtherance of a trade dispute, provided that any act performed by such combination or society would not be unlawful if done by one person. Such action must not include riot, sedition, or crime against the State.

"The Wages Attachment Act, 1895," prevents wages below £2 a week being attached for debt. It does not interfere with any workman being sued for debt in the ordinary course, but prevents a grasping creditor from stepping in before others and seizing wages in advance before they are earned. [There is also "The Wages Protection Act, 1899," which has to be read with "The Truck Act, 1891," previously alluded to.]

"The Master and Apprentice Act, 1865," applies mainly to the indenturing of apprentices by the State, such apprentices being children of destitute parents. In other respects the law of England is held to be the law governing the relations between masters and apprentices in this colony; but special sections of the Act apply to the punishment of apprentices for absenting themselves from duty, and to the fine on a master for neglecting or ill-using his apprentice. Sections 150 and 213 of "The Criminal Code Act, 1893," also relate to the proper care of apprentices by their masters.

"The Mining Act, 1898," consolidates and repeals all statutes of a similar nature, and includes various amendments suggested by the Conference of Wardens of Goldfields, and by mining associations. The mining legislation refers to labour in any kind of mine, and deals with the position of tributers and wagesmen, the examination for certificates for mine-managers, &c., provision for ventilation, precautions against accident by blasting, &c. There are amending Acts of 1900, 1901, and 1902, providing for the inspection of mines by workmen, limiting the number of hours of working underground, and making provision for the payment of overtime.

In or about coal-mines women and boys are not allowed to be engaged. There is provision for the appointment of inspectors, mine-managers, engine-drivers, &c., and rules are furnished as to the ages and working-hours of those employed in attending engines, machinery, winding-gear, &c. The ventilation of mines is provided for, and the necessary safeguards imposed as to blasting operations, working in foul air, protecting lights, &c. There are regulations for the management and administration of funds and moneys, which relate chiefly to the withdrawal of moneys from the Sick and Accident Fund, and returns demanded from trustees of the fund.

There is also "The Deaths by Accident Compensation Act, 1880."

"The Public Contracts Act, 1900," provides that any person entering into a contract exceeding the value of twenty pounds with the Government, any Education Board, Harbour Board, or local authority, and employing skilled or unskilled manual labour in the execution of such contract, shall be bound to

pay wages at the rate ruling in the locality of the work, but in no case lower than the rates fixed by the Arbitration Court. The maximum length of the working-day on any public contract is not to exceed eight hours. A penalty not exceeding £10 is recoverable by summary proceedings for every breach of the provisions of the Act.

Co-operative Public Works.

Remarks on the co-operative system of constructing public works were given in a special article in the Year-book of 1894. The numbers of workmen employed in this manner under Government departments during each month of the financial year 1902–1903 were :—

		Roads and Lands and Survey Departments.	Public Works Department.	Total.
April,	1902 ..	748	846	1,594
May,	„ ..	813	1,102	1,915
June,	„ ..	943	1,173	2,116
July,	„ ..	1,117	1,261	2,378
August,	„ ..	1,105	1,317	2,422
September,	„ ..	1,229	1,569	2,798
October,	„ ..	1,211	1,715	2,926
November,	„ ..	1,324	1,865	3,189
December,	„ ..	1,573	1,881	3,454
January,	1903 ..	1,512	2,386	3,898
February,	„ ..	1,910	2,771	4,681
March,	„ ..	2,338	2,913	5,251

The average number of men employed in each year was as follows :—

Year.	Roads and Lands and Survey Departments.	Public Works Department.	Total.
1891–92	261	527	788
1892–93	280	842	1,122
1893–94	933	1,015	1,948
1894–95	1,103	962	2,065
1895–96	1,572	764	2,336
1896–97	1,459	854	2,313
1897–98	1,552	890	2,442
1898–99	1,613	1,194	2,807
1899–1900	1,825	1,243	3,068
1900–1901	1,820	2,090	3,910
1901–1902	1,894	2,673	4,567
1902–1903	1,319	1,733	3,052
Annual average last twelve years ..	1,303	1,232	2,535

Labour Department.

The total number of men for whom employment has been found by the Department of Labour up to the end of March, 1903, is given below. The statement also exhibits the number of persons dependent upon the men assisted:—

	Men.	Dependents.
June, 1891, to 31st March, 1892	2,593	4,729
1st April, 1892, to 31st March, 1893 ..	3,874	7,802
1st April, 1893, to 31st March, 1894 ..	3,341	7,942
1st April, 1894, to 31st March, 1895 ..	3,030	8,883
1st April, 1895, to 31st March, 1896 ..	2,871	8,424
1st April, 1896, to 31st March, 1897 ..	1,718	4,719
1st April, 1897, to 31st March, 1898 ..	2,035	4,928
1st April, 1898, to 31st March, 1899 ..	2,115	4,759
1st April, 1899, to 31st March, 1900 ..	2,147	4,471
1st April, 1900, to 31st March, 1901 ..	3,124	5,432
1st April, 1901, to 31st March, 1902 ..	1,830	2,747
1st April, 1902, to 31st March, 1903 ..	3,704	5,934
	32,382	70,770

SECTION XXIV.—FINANCE.

SUBSECTION A.—REVENUE AND EXPENDITURE OF THE GENERAL GOVERNMENT.

THE revenue for the year ended 31st March, 1903, was £6,447,435, and the ordinary expenditure £6,214,019, leaving an excess of revenue over expenditure of £233,416. Adding to this the balance brought forward from the previous year (1901–1902), of £270,489, gives a sum of £503,905. A transfer of £200,000 was made to the Public Works Fund, leaving at the close of the year a balance amounting to £303,905.

The chief heads of revenue and expenditure are shown hereunder:—

REVENUE AND EXPENDITURE.

Revenue.	£	£
Balance on 31st March, 1902		270,489
Customs duties	2,335,643	
Beer duty	90,400	
Stamps (including postal and telegraph cash receipts)	978,939	
Land-tax	296,062	
Income-tax	200,684	
Railways	1,982,551	
Registration and other fees	83,881	
Marine dues	32,968	
Miscellaneous	133,204	
Territorial revenue	252,277	
		6,386,609
Other receipts—		
Proceeds of debentures for increases of sinking fund	57,500	
Recoveries in respect of expenditure of previous years	3,326	
		60,826
		£6,717,924

Expenditure.	£	£
His Excellency the Governor	7,000	
Legislative	49,987	
Ministers' salaries and allowances	12,931	
Interest and sinking fund charges	1,900,979	
Exchange and commission	20,525	
Pensions, civil and military	47,446	
Old-age pensions	212,962	
Railways	1,357,385	
Public instruction	566,568	
Postal and telegraph services	485,660	
Judicial and legal	258,633	
Hospitals and charitable institutions	109,071	
Defence	214,226	
Subsidies to local bodies	71,049	
Department of Agriculture	101,134	
Lunatic asylums	66,002	
Valuation Department	26,248	
Customs	36,045	
Marine (including harbours and lights)	44,064	
Printing and stationery	35,847	
Land and Income Tax Department	19,596	
Registration of land and deeds, births, deaths, and marriages	21,765	
Public buildings and domains	24,019	
Miscellaneous expenditure	283,208	
Territorial expenditure	241,469	
		6,214,019
Other expenditure—		
Transferred to Public Works Fund		200,000
Balance on 31st March, 1903		303,905
		£6,717,924

Ordinary Revenue.

The ordinary revenue shows an increase for the year 1902–1903 of 5·70 per cent. over the figures for 1901–1902. When considering the figures given it must be remembered that population increased at the rate of 3·15 per cent., so that any rate above this means a higher ratio of revenue. Taking the items in order of their magnitude, the advance is shown below :—

Heads of Revenue.	Ordinary Revenue.				Increase.	
	1901–1902.	Per Cent. of Total.	1902–1903.	Per Cent. of Total.	Numerical.	Centesimal.
	£		£		£	Per Cent.
Customs duties	2,201,116	37·93	2,335,643	38·07	134,527	6·11
Railways...	1,869,489	32·21	1,982,551	32·32	113,062	6·05
Stamps (including postal and telegraph cash receipts)	908,671	15·66	978,939	15·96	70,268	7·73
Land-tax...	312,836	5·39	296,062	4·83	−16,774*	− 5·36*
Income-tax	179,397	3·09	200,684	3·27	21,287	11·87
Beer duty	90,233	1·55	90,400	1·47	167	0·19
Registration and other fees	76,492	1·32	83,881	1·37	7,389	9·66
Marine	31,456	0·54	32,968	0·54	1,512	4·81
Miscellaneous	133,761	2·31	133,204	2·17	− 557*	− 0·42*
Ordinary revenue...	5,803,451	100·00	6,134,332	100·00	330,881	5·70

* Decrease.

The amount derived from Customs duties was 6·11 per cent. greater than that shown for 1901–1902, beer duty 0·19 per cent., income-tax 11·87 per cent., stamps, &c., 7·73 per cent., and railway revenue shows an advance of 6·05 per cent. While the population of the colony increased by 3·15 per cent. during 1902–1903, the ordinary revenue advanced at the much higher rate of 5·70, as shown above.

The Customs and excise duties in 1902–1903 accounted for £39 10s. 10d. out of every £100 of ordinary revenue collected; railways, £32 6s. 5d.; and stamps, &c., £15 19s. 2d. Of other items, the land-tax yielded 4·83 per cent. and income-tax 3·27 per cent. of the revenue.

Territorial Revenue.

Territorial revenue belonging to the Consolidated Fund increased from £249,619 in 1901–1902 to £252,277 in 1902–1903, or at the rate of 1·06 per cent. In the previous year, 1901–1902, there was a decrease of 7·62 per cent. Details for the last two years are :—

	Territorial Revenue.				Increase or Decrease, 1902-1903.	
	1901-1902.	Per Cent. of Total.	1902-1903.	Per Cent. of Total.	Numerical.	Centesimal.
	£		£		£	Per Cent.
Cash land sales	59,576	23·87	37,446	14·84	– 22,130	– 37·15
Deferred-payment land sales	8,435	3·38	6,702	2·66	– 1,733	– 20·55
Pastoral runs, rents, miscellaneous	181,608	72·75	208,129	82·50	26,521	14·60
Territorial revenue	249,619	100·00	252,277*	100·00	2,658	1·06

* Exclusive of revenue derived from land set apart for State forests, £3,871; lands for close settlement, £109,820; and of the Cheviot Estate, £14,603. These moneys are credited in the separate *loan* accounts to which they belong. The amount of all moneys taken by the Receivers of Land Revenue during the year ended 31st March, 1903, will be found stated, under each head, in Section XXV., "Crown Lands."

By the foregoing table the cash land sales for 1902–1903 are shown to have decreased by 37 per cent., and to supply nearly 15 per cent. of the whole territorial revenue of the Consolidated Fund; while rents and miscellaneous, which constitute over 82 per cent. of the total, have increased by 14·60 per cent.

Ordinary and Territorial Revenue.

The total ordinary and territorial revenue is found to have increased from £6,053,070 in 1901–1902 to £6,386,609 in 1902–1903, at the rate of 5·51 per cent., or 2·36 per cent. more than the rate at which population increased :—

	Ordinary. £	Territorial. £	Total. £
Year 1902–1903	6,134,332	252,277	6,386,609
„ 1901–1902	5,803,451	249,619	6,053,070
Increase ..	330,881	2,658	333,539

After allowing for alteration in system of charging interest and sinking fund, the charges of the public debt paid out of the Consolidated Fund, in proportion to the ordinary and territorial revenue, are found to have fallen from 41·6 per cent. in 1890–91 to 29·77 per cent. in 1902–1903.

If the sum of £44,148, the amount of territorial revenue received by way of land sales in 1902–1903, is deducted from the total revenue the charges of the public debt will be found to have absorbed 29·97 per cent. of the revenue, reduced by the sum derived from relinquishment of real estate of the Crown.

Total Revenue of General Government.

The whole of the revenue of the General Government arising from taxation as well as from other sources for the last eight financial years exhibits great progress. The rates of taxation and of revenue per head of mean population are given to illustrate this :—

Year ended 31 March.	Revenue.			Taxation per Head of Mean Population.	Revenue per Head of Mean Population.
	From Taxation.	From other Sources.	Total.		
	£	£	£	£ s. d.	£ s. d.
1896	2,335,760	2,220,255	4,556,015	3 7 1	6 10 10
1897	2,521,911	2 276,797	4,798,708	3 11 0	6 15 1
1898	2,678,576	2,400,654	5,079,230	3 13 11	7 0 2
1899	2,707,099	2,551,129	5,258,228	3 13 3	7 2 3
1900	2,891,126	2,808,492	5,699,618	3 16 10	7 11 6
1901	3,042,890	2,864,026	5,906,916	3 19 6	7 14 4
1902	3,113,079	3,039,760	6,152,839	3 19 8	7 17 6
1903	3,277,964	3,169,471	6,447,435	4 1 8	8 0 8

The total revenue is shown to have increased from £4,556,015 in 1895–96 to £6,447,435 in 1902–1903, a difference of £1,891,420, while the proportion to population has increased by nearly £1 10s. per head.

The greater yield from the sources of taxation exhibited by the above figures can be regarded as indicative of increased prosperity enjoyed by the people of the colony.

Ordinary Revenue Expenditure.

The expenditure for 1902–1903 (exclusive of expenditure properly belonging to territorial purposes) amounted to £6,214,019, of which the largest item, after the charges of the public debt, £1,900,979, was on account of railways, £1,357,385. Public instruction cost £556,568, of which £465,348 was for carrying on the Board schools, £23,578 for technical and higher education, £20,397 for Native schools, £20,113 for industrial schools, and £27,854 for school-buildings. The postal and telegraph services cost £485,860. Under the heading "Judicial and Legal" the total sum expended was £258,633, of which the largest item was the police, £123,804; the next, District and Magistrates' Courts, £47,169; and, thirdly, prisons, £32,070. Hospitals and charitable institutions cost £109,071, and the lunatic asylums £66,002. Defence required £214,226; the Department of Agriculture £101,134; and the Valuation Department £26,248. Payments of old-age pensions required £212,962 for the year.

Territorial Revenue Expenditure.

The chief items of expenditure under this head are the Lands and Survey Department, £129,795, and Mines, £12,578; while there was paid to local bodies £93,496 (£33,163 being "thirds" and "fourths" under the Land Act, and £16,608 for the Greymouth, £3,602 for the New Plymouth, £39,647 for the Westport, and £476 for the Nelson Harbour Boards); besides £5,145 expended in management of water-races, and £457 in rates on Crown lands.

Ordinary and Territorial Revenue Expenditure: Six Years.

The expenditure out of ordinary and territorial revenue during the last six financial years is tabulated, specifying the chief heads of expenditure. It must be noted that the old-age pensions become a large item for the years 1899–1900, 1900–1901, 1901–1902, and 1902–1903. The development of the Departments of Agriculture, Public Health, &c., also contributed to raising the expenditure latterly:—

Expenditure.	Financial Years (ended 31st March).					
	1897-98.	1898-99.	1899-1900.	1900-1901.	1901-1902.	1902-1903.
	£	£	£	£	£	£
Charges of the public debt ..	1,741,413	1,767,468	1,749,394	1,745,616	1,803,939	1,900,979
Railways ..	849,923	968,917	1,039,412	1,145,088	1,280,997	1,357,385
Public instruction (including school-buildings, industrial and Native schools, and deaf-and-dumb institution)	466,925	475,218	472,653	481,087	539,317	566,568
Postal and telegraph ..	362,993	388,546	388,582	416,364	463,817	485,860
Militia and Volunteers	91,388	119,051	162,940	229,704	191,250	214,226
Old-age pensions	..	3,124	157,095	199,708	210,045	212,962
Crown lands and surveys ..	119,920	114,469	123,441	137,838	122,278	129,795
Police and Armed Constabulary ..	104,214	115,293	115,752	117,744	120,629	123,804
Other expenditure	865,596	906,425	930,858	1,006,555	1,163,643	1,222,440
Totals ..	4,602,372	4,858,511	5,140,127	5,479,704	5,895,915	6,214,019

Loan Accounts Expenditure, 1902–1903.

In addition to the expenditure above referred to, there were also—excluding operations on debentures, &c.—disbursements during the financial year ended 31st March, 1903, out of the Public Works Fund to the amount of £1,514,445, chiefly for roads, railway construction, and for public buildings; also out of the Land for Settlements Account the large sum of £372,925 for purchase of estates to be cut up for close settlement, including contingent expenses. This account also aided the Consolidated Fund by reducing the interest to be paid to the extent of £93,599. The sum of £39,424 was expended in the opening up and management of State coal-mines. The Loans to Local Bodies Account, which deals with moneys used chiefly for roading the more inaccessible country and for water-supply, shows an expenditure of £253,448; and for interest on debentures, surveys, roads, &c., in connection with the

Cheviot Estate £9,037 was paid. Details of all these are given. The total expenditure out of loan accounts was £2,283,198, or, adding £425,100 for redemption of debentures and for temporary advances repaid, £2,708,298. As previously explained, this account was aided by a transfer from revenue of £200,000 to the Public Works Fund.

EXPENDITURE OUT OF LOAN ACCOUNTS, 1902-1903.

	£	£
Public Works Fund—		
Immigration	142	
Public works, departmental	12,819	
Railways	759,753	
Roads	283,169	
Development of goldfields	24,213	
Purchase of Native lands	15,783	
Telegraph extension	68,578	
Public buildings	197,455	
Lighthouses, harbour-works, and defences	13,581	
Tourist and health resorts	10,949	
Rates on Native lands	471	
Contingent defence	37,004	
Lands improvement	2,348	
Charges and expenses of raising loans	88,180	
		1,514,445
Cheviot Estate Account—		
Interest (including arrears)	8,866	
Surveys, roading, &c...	171	
		9,037
Lands for Settlement Account—		
Purchase of estates	353,462	
Expenses	19,263	
Interest recouped to Consolidated Fund	93,599	
Charges and expenses on issue of debentures under the Act	320	
Services not provided for	200	
		466,844
State Coal-mines Account—		
Salaries and other charges		39,424
Loans to Local Bodies Account—		
Grants to local bodies	234,870	
Roads to open up Crown lands	18,578	
		253,448
Total		2,283,198
Lands for Settlement Account—		
Renewal of debentures	250,000	
Debentures paid off	10,100	
Aid to Public Works and Land Settlement Acts—		
Temporary advances repaid	165,000	
		425,100
Total		£2,708,298

The expenditure out of loan accounts for five years may be summarised as given in the next table :—

Heads of Expenditure out of Loan Accounts.	Financial Years.				
	1898-99.	1899-1900.	1900-1901.	1901-1902.	1902-1903.
	£	£	£	£	£
Charges and expenses of raising loans	225	28,322	1,460	5,620	88,180
Cheviot Estate purchase and expenses	16,497	8,917	8,937	8,881	9,037
Contingent defence ..	13,867	42,810	37,650	146,876	37,004
Immigration	105	385	214	140	142
Land purchases	*571,642	*501,355	*280,575	*516,385	*482,627
Lighthouses, harbour-works, and defences	15,662	9,026	6,517	12,159	13,581
Public buildings	107,267	115,427	121,364	145,600	197,455
Public Works departmental expenditure	10,090	12,572	12,933	16,404	12,819
Railway-construction and other works connected with railway-extension ..	374,141	417,937	717,723	1,333,941	759,753
Rates on Native lands ..	347	744	673	570	471
Roads	†312,506	†316,753	†353,131	†435,669	†301,747
Telegraph-extension ..	28,551	26,771	50,101	31,729	68,578
Development of goldfields..	17,355	21,815	15,907	15,325	24,213
Tourist and health resorts..	..	..	..	11,260	10,949
Lands improvement ..	..	..	..	1,677	2,348
State coal-mines	..	..	..	..	39,424
Payments to local bodies under Government Loans to Local Bodies Acts ..	75,428	68,770	138,956	208,531	234,870
Totals	1,543,683	1,571,604	1,746,141	2,890,767	2,283,198

* Including sums expended in the purchase of land for settlements—viz., £518,459 in 1898-99; £469,331 in 1899-1900; in 1900-1901, £251,837; in 1901-1902, £498,124; and in 1902-1903, £466,844.

† Including sums expended under Loans to Local Bodies Acts—viz., £16,972 in 1898-99; £31,363 in 1899-1900; in 1900-1901, £37,390; in 1901-1902, £31,979; and in 1902-1903, £18,578.

NOTE.—*Excluding* amounts applied to investments by way of advances to settlers with charges and expenses, besides amounts for debentures redeemed and advances repaid.

The total amount of actual loan-moneys under various heads raised from the beginning is roughly shown further on in a table dealing with the public debt of the colony.

Although the Public Works Fund forms the main source of the expenditure out of loan accounts, all the money included in it has not been raised from loans. Amounts from the revenue of the Consolidated Fund were paid to the Public Works Fund during the last twelve financial years as follows :—

	£
1891–92	30,000
1892–93	200,000
1893–94	250,000
1894–95	250,000
1895–96	150,000
1896–97	150,000
1897–98	300,000
1898–99	425,000
1899–1900	450,000
1900–1901	500,000
1901–1902	500,000
1902–1903	200,000
Total	£3,405,000

The expenditure each year since 1884 on services provided for by the Public Works Fund has been:—

Year.	Immigration.	Railways.	Roads.	Development of Goldfields.	Telegraph Extension.	Public Buildings.	Lighthouses, &c.	Other Services.	Totals.
	£	£	£	£	£	£	£	£	£
1884–85...	57,148	663,063	317,043	8,029	25,799	117,361	34,033	114,251	1,336,727
1885–86...	11,675	725,496	335,904	9,032	36,010	86,859	133,975	136,435	1,475,386
1886–87...	12,454	615,265	278,617	7,365	18,952	89,598	148,705	162,228	1,333,484
1887–88...	15,598	403,726	219,519	1,016	22,984	90,529	76,825	135,962	966,159
1888–89...	8,791	272,077	106,440	55	12,047	34,592	47,593	132,344	613,939
1889–90...	867	289,572	84,126	284	16,346	35,473	9,434	46,362	482,464
1890–91...	1,823	180,020	71,289	821	16,292	22,819	2,666	39,026	334,786
1891–92...	817	154,416	101,605	2,257	27,773	34,791	7,347	62,495	391,501
1892–93...	242	220,894	105,506	3,811	29,245	31,101	11,205	60,502	462,506
1893–94...	343	176,304	147,418	5,272	16,127	44,032	6,588	10,713	406,797
1894–95...	101	247,545	61,757*	5,865	19,229	54,190	3,145	9,578	401,410*
1895–96...	*Cr.* 10	197,105	66,774*	9,345	35,538	76,529	7,410	19,639	412,330*
1896–97...	301	207,231	64,292*	10,508	36,791	70,579	11,600	26,683	427,985*
1897–98...	70	351,600	290,777†	33,117	29,384	73,585	5,295	81,715	865,543†
1898–99 ..	105	374,141	295,534†	17,354	28,551	107,267	15,662	77,713	916,327†
1899–1900	385	417,937	285,592†	21,815	26,771	115,427	9,026	116,330	993,223†
1900–1901	214	717,723	315,791†	15,907	50,101	121,364	6,517	81,404	1,309,021†
1901–1902	140	1,333,941	403,690†	15,325	31,729	145,600	12,159	200,668	2,143,252†
1902–1903	142	759,753	283,169†	24,213	68,578	197,455	13,581	167,554	1,514,445†

* Exclusive of moneys spent on roads under Lands Improvement, Native Lands Purchase, and Government Loans to Local Bodies Accounts: £103,076 in 1894–95, £162,757 in 1895–96, £173,358 in 1896–97.

† The expenditure on roads under the first two Acts mentioned above (*) is included as part of Public Works Fund; the sum of £18,770 was also spent out of Loans to Local Bodies Account on roads to open up Crown lands in 1897–98, £16,972 in 1898–99, £31,363 in 1899–1900, £37,390 in 1900–1901, £31,979 in 1901–1902, and £18,578 in 1902–1903. These moneys have been excluded, as have also small sums expended in roading, &c., the Cheviot Estate.

Conversion Account.

Three-per-cent. stock to the value of £230,040 was inscribed during the year 1902–1903, which began with a credit balance of £4,704 in this account. Of this sum, £52,000 was applied to pay off debentures, £165,000 was transferred to the Public Works Fund for repayment of advance made on security of short-dated debentures, and £800 was exchanged for debentures under "The Canterbury Loan Ordinance, 1862" (6 per cent.). Premiums amounting to £240 were paid on these conversions. Expenses, the chief items of which

were discount (£11,104), stamp duty (£3,032), brokerage and commission (£574), office expenses, rents, law charges, &c. (£331), absorbed £15,041, leaving a credit balance in this account of £1,662 on the 31st March, 1903.

Loans for Government Advances to Settlers.

A notable feature in the legislation of the year 1894 was the passing of the Government Advances to Settlers Act, a description of which, with its amending Acts and the loan operations under the same, will be found in Part III.

The loans authorised to the 31st March, 1903, classified according to provincial districts, are shown in tabular form :—

Provincial Districts.	Loans authorised.		
	Number of Applications.	Amount applied for.	Ambunt of Advances authorised.
		£	£
Auckland	2,509	822,946	719,168
Taranaki	1,862	828,272	729,759
Hawke's Bay	845	267,370	238,260
Wellington	3,302	1,271,462	1,117,738
Marlborough	419	176,517	160,005
Nelson	190	59,370	52,705
Westland	156	42,045	36,695
Canterbury	1,045	332,857	290,235
Otago	2,594	1,102,676	972,375
Totals	12,922	4,903,515	4,316,940

Of the 12,922 advances authorised, 1,629 applicants declined the grants (£735,280) offered them, so that the net advances to the 31st March, 1903, numbered 11,293, and amounted to £3,581,660.

Of the total advances authorised, 10,534 were for advances under £500 in value, and 2,388 over.

The number of applications received to the 31st March, 1903, was 16,643, for an aggregate amount of £5,927,495.

The advances authorised on fixed loans, according to provincial districts, to the 31st March, 1903, were :—

Provincial Districts.	Number.	Amount of Mortgage.	Value of Security.
		£	£
Auckland	50	16,290	41,498
Taranaki	63	45,935	106,975
Hawke's Bay	18	6,750	15,668
Wellington	82	59,340	139,548
Marlborough	1	1,200	2,005
Nelson	3	250	963
Westland	6	670	2,113
Canterbury	17	14,725	31,804
Otago	89	76,235	117,732
Totals	329	221,395	458,306

The liabilities and assets at 31st March, 1903, of the Government Advances to Settlers Office were :—

Dr. *Liabilities.*	£	£ s. d.	Cr. *Assets.*	£ s. d.	£ s. d.
3-per-cent. Loan, redeemable 1st April, 1945, "A"	1,500,000		Investment Account—		
3-per-cent. Loan, redeemable 1st April, 1945, "B"	600,000		Advances on mortgage	3,516,285 0 0	
3-per-cent. sundry loans ...	740,000		Less repayments ...	925,741 19 0	
Advances on account of loan	200,000				2,590,543 1 0
		2,940,000 0 0	Temporary investments, Bank of New Zealand guaranteed stock		4,836 17 0
Assurance Fund		67,911 16 8	Sinking Fund investment with Public Trustee ...		125,867 7 10
Suspense Account		4,411 17 7	Assurance Fund investment with Public Trustee ...		67,911 16 8
Accrued interest payable ...		49 14 1	Mortgage instalments receivable, overdue		1,385 8 8
Profit and Loss Account ...		3,167 11 1	Bills receivable		890 11 7
			Interest receivable, overdue		6,043 17 0
			" accrued		27,173 8 2
			Cash in hand and in bank ...		33,007 8 1
			Loan-flotation charges ...		157,881 3 5
		£3,015,540 19 5			£3,015,540 19 5

"The Government Advances to Settlers Act Amendment Act, 1899," as an encouragement to the early payment of the prescribed instalments of interest on fixed loans, and of interest and principal on loans under the instalment principle, provides for a rebate to the mortgagor, which reduces his interest to 4½ per cent. in lieu of 5 per cent. per annum.

There are new alternative modes of disposing of moneys paid in advance laid down in this measure, but it is optional with mortgagors to adopt the new system instead of that previously in operation in respect of moneys paid before the commencement of the new Act, and which are held under the original arrangements.

Provision is made for the readjustment of loans by memorandum of adjustment, which gives elasticity to the system by treating the balance of principal due as a fresh loan granted for a new term.

The margin of security on loans is provided for as follows: In the case of fixed loans the amount of the loan is not to exceed three-fifths of the value of the security, while in case of loans under the instalment system on freehold security of first-class agricultural land the amount of the loan is not to exceed two-thirds the value of the security; on other rural freeholds the limit is three-fifths.

Advances may now be made on the security of urban or suburban land, but on the instalment system only, and with limitation of amount to a maximum of £2,000 and a minimum of £25.

Urban land is defined as that situate in a borough having a population of at least two thousand persons, and which is not used for farming, dairying, or market gardening; and suburban land means that which is situate in a borough having under two thousand people, or any town or vicinity, and which is not used for agricultural or dairying purposes as above referred to.

As to security for loans: In the case of urban lands on which there are buildings, the amount of the loan is not to exceed three-fifths of the value of the land apart from the buildings, *plus* one-half of the value of the buildings apart from the land. When the land is suburban, having buildings thereon, the loan is not to exceed one-half of the value of the land apart from the buildings, *plus* one-half of the value of the buildings separately.

When the land is urban or suburban, but has no buildings, the loan is not to exceed one-half of the value of the land, and there is not to be any loan except for the erection of buildings, and to be by way of instalments as erection proceeds.

There is a further subdivision of the Act, under which special provisions are made for protecting the interests of the Advances to Settlers Department with respect to other than freehold securities.

The legislation for authorisation of loan moneys for Advances to Settlers has been: Under the principal Act of 1894, £3,000,000; under the Amendment Act of 1901, £1,000,000.

New Zealand Consols.

Another important financial Act, termed the New Zealand Consols Act, was passed in 1894, with the intention of providing further means of investment for the savings of persons resident in the colony. Some progress is being made in this class of deposits, which tends to show that the public may in time recognise the system as a means of safe and profitable investment of their savings. It is singular that deposits of moneys belonging to trust funds or minors are not more freely made. It is thought that the advantage of such an investment at a fair rate of interest and of a permanent character is not widely enough known.

Up to the 31st March, 1899, deposits amounting to £385,925 had been received, in sums ranging from £5 to £150,000. During 1899–1900 the deposits inscribed totalled £55,562; in 1900–1901, £17,902; in 1901–1902, £8,935; and in 1902–1903, £4,232: making the sum invested to the 31st March, 1903, £472,556.

The system of making deposits in New Zealand Consols is fully described in Part III.

Aid to Public Works and Land Settlement.

"The Aid to Public Works and Land Settlement Act, 1896," empowered the Colonial Treasurer to raise £1,000,000—in aid of the Public Works Fund to the extent of £500,000, and the Lands Improvement Account and the Native Lands Purchase Account £250,000 each.

The Aid to Public Works and Land Settlement Act Amendment Act, passed in 1897, authorised the raising of an additional sum of £250,000, to be applied for the purpose of procuring £200,000 for

further rolling-stock for railways, and for the repair of damages to lines by floods or otherwise; £25,000 for erection and repair of public-school buildings, and another sum of £25,000 for purposes building and equipment of technical schools.

The Act of 1898 provided for raising £500,000, of which £175,000 was allocated to railways-construction, £200,000 was for new rolling-stock for open railways, and £125,000 for the construction of roads, bridges, and other works authorised.

Under another Act of 1899, the sum of £1,000,000 was authorised —£300,000 for railway-construction, £225,000 for rolling-stock, £350,000 for land settlement and goldfields development, £50,000 for school-buildings, £50,000 for purchase of Native lands, and £25,000 for harbour defence.

A further Act of 1900 provided for the raising of £1,000,000, of which £500,000 was allocated to railway-construction, £300,000 for rolling-stock, £150,000 for land settlement, and £50,000 for goldfields development.

Again, an Act of 1901 authorised raising the sum of £1,250,000. Of this, £600,000 was applied to railway-construction, £400,000 for rolling-stock, £200,000 for land settlement, and £50,000 to development of goldfields.

"The Aid to Public Works and Land Settlement Act, 1902," authorised raising, in the colony or elsewhere, of sums not exceeding £1,750,000 altogether, by debentures or scrip, or by the creation or issue of inscribed stock under "The New Zealand Consolidated Stock Act, 1877."

Provision was made for obtaining funds pending the raising of the money authorised, by the sale, &c., of short-dated debentures, bearing interest not exceeding 4 per cent. per annum, and having a currency of not more than seven years.

All the money raised under this Act is applied to the following purposes:—

	£
1. Railways—	
Railway-construction	750,000
Additional rolling-stock, &c., for open lines ..	450,000
2. Land settlement and goldfields development—	
Construction of roads, tracks, and bridges to open up back blocks, and other work in connection therewith	450,000
For developing goldfields	50,000
3. For telegraph extension	50,000
	£1,750,000

Loans under Land for Settlements Acts.

The moneys raised under these Acts and the operations by way of purchasing estates to be cut up for close settlement form the subject of a special section of this part of the Year-book (No. XXVI.).

"The Local Bodies' Loans Act, 1901."

The above Act consolidates all former measures dealing with the borrowing-powers of local bodies. It does not affect the securities issued for any loan raised under any Act repealed.

As to Government loans to local bodies, the yearly rate of interest and the period during which interest is payable by the local authority shall, at the option of such authority, be—

(*a.*) Four and a half per centum per annum for a period of twenty-six years; or

(*b.*) Four per centum per annum for a period of thirty-two years; or

(*c.*) Three and a half per centum per annum for a period of forty-one years.

The interest payable in respect of every existing loan the period of which is twenty-six years shall be 4½ per centum per annum, unless such loan be adjusted under either of the alternatives (*b*) or (*c*) mentioned above. These readjustments may be applied to any loan existing at the time of the passing of the Act, should the local authority interested so elect.

At the expiration of the period during which interest is payable the liability of the local authority shall cease without further payment.

SECTION XXIV.—FINANCE—*continued.*

SUBSECTION B.—TAXATION.

THE direct taxation prior to 1892 consisted of a property-tax of 1d. in the pound on all assessed real and personal property (with an exemption of £500), and the stamp duties; but in 1891 a Land and Income Assessment Act was passed repealing the property-tax. A full description of the system of the land and income tax will be found in a special article in Part III. of this work. The leading features only are briefly stated here.

The Assessment Act of 1891 provided for an ordinary land-tax on the actual value of land, allowing an owner to deduct any amount owing by him secured on a registered mortgage. Under the original Act the deduction for improvements might not exceed £3,000; but by the Amendment Act of 1893 the value of all improvements whatsoever was exempted from liability to land-tax. Besides this, an exemption of £500 was allowed when the balance, after making deductions as above stated, was not above £1,500 and beyond that a smaller exemption was granted, but ceasing when the balance amounted to £2,500. There is a consolidation Act passed in 1900 now in force. Mortgages are subject to the land-tax, but in 1902–1903 the rate was lowered from the full amount to ¾d. in the pound. The revenue from the ordinary land-tax is, in round numbers, about £220,000 per annum, being somewhat lessened by the reduction of the mortgage-tax, notwithstanding increased valuations. The rate of ordinary land-tax for 1902–1903 was 1d. in the pound. Native land occupied by Europeans is taxed ½d. in the pound on the unimproved value.

In addition to the ordinary land-tax, there is a graduated land-tax, which commences when the unimproved value is £5,000. For the graduated land-tax the present value of all improvements is deducted; but mortgages are not deducted. The Act of 1893, while reducing the ordinary taxation on land by exempting all improvements, increased the graduated tax, and the revised rates are now one-eighth of a penny in the pound sterling when the value is £5,000 and is less than £10,000, from which the rate increases with the value of the property by further steps of an eighth of a penny until the maximum of 2d. in the pound is reached, payable when the value is £210,000, or exceeds that sum.

This graduated tax yields, in round numbers, £80,000 per annum, which is not included in the sum of £220,000 given above. Twenty per cent. additional tax is levied in case of persons who have been absent from the colony for not less than one year prior to the passing of the yearly taxing Act. This amounts to about £1,000, and is included in the £80,000 shown above.

The taxable balances of real estates for purposes of the graduated tax according to the latest information were :—

Rate.	Taxable Balance.	Tax.	Rate.	Taxable Balance.	Tax.
	£	£		£	£
⅛d. ..	8,728,499	4,547	1¼d. ..	1,004,810	5,233
¼d. ..	4,706,951	4,903	1⅜d. ..	939,166	5,381
⅜d. ..	2,480,025	3,875	1½d. ..	287,162	1,795
½d. ..	1,979,768	4,125	1⅝d. ..	472,972	3,202
⅝d. ..	1,745,783	4,546	1¾d. ..	369,013	2,691
¾d. ..	1,912,581	5,977	1⅞d. ..	197,329	1,542
⅞d. ..	1,598,467	5,828	2d. ..	1,021,827	8,515
1d. ..	2,521,968	10,925			
1⅛d. ..	1,012,695	4,747	..	30,979,016	77,832

Besides the land-tax (ordinary and graduated) there is also levied by way of further direct taxation an income-tax on all incomes above £300. From the yearly income of every taxpayer there is deducted by way of special exemption the sum of £300, and from taxable incomes a further deduction up to £50 per annum for life-insurance premiums is allowed. The rate of income-tax for 1902–1903 was 6d. in the pound on the first taxable £1,000, and 1s. in the pound on any excess of £1,000.

Companies pay 1s. in the pound, and are not allowed exemption. The Act of 1893 further disallowed the £300 exemption in the case of persons not domiciled in New Zealand.

The revenue derived from income-tax may be roughly set down at £200,000 per annum.

The indirect taxation is made up of Customs duties, and excise duty on beer made in the colony.

The following statement shows the total amount raised by the General Government taxation in 1885, 1890, and the last eight financial years ending 31st March :—

	Amount of Revenue raised by Taxation.	Amount per Head of Population (excluding Maoris).
	£	£ s. d.
1885	2,016,730 ..	3 10 10
1890	2,173,985 ..	3 10 0
1895–96	2,335,761 ..	3 7 1
1896–97	2,521,911 ..	3 11 0
1897–98	2,678,576 ..	3 13 11
1898–99	2,707,099 ..	3 13 3
1899–1900	2,891,126 ..	3 16 10
1900–1901	3,042,890 ..	3 19 6
1901–1902	3,113,079 ..	3 19 8
1902–1903	3,277,964 ..	4 1 8

The average annual amount of revenue raised by taxation during the period 1895–96 to 1902–1903 has been £3 15s. 4d.

It may be well to call attention to the fact that a rise in the amount of taxation yielded per head of population may indicate (outside the question of increasing the rate of any particular tax levied) a satisfactory condition of business, as showing activity.

As the Maoris contribute somewhat to the Customs revenue, an allowance should be made on that account to ascertain more correctly the amount of taxation per head of the rest of the people. By including Maoris the Customs and excise duties per head of the rest of the population would be reduced by 3s. 1d. for the year 1902–1903. If this amount be deducted from the taxation per head given for that year, the rate would be reduced from £4 1s. 8d. to £3 18s. 7d. This latter rate may fairly be used for comparison with the rates in the States of Australia.

Of the total amount of taxation stated for the year 1902–1903, the indirect taxation—*i.e.*, Customs and excise duties—amounted to £2,426,043, while land and income tax, with stamps for taxation, yielded £851,921, which constitutes direct taxation. So that the colony still raises 74 per cent. of its taxation revenue by means of the indirect method.

A table of the Customs tariff is given in detail in Part I. of this book (pp. 85–101), and the duties leviable upon estates of deceased persons on page 457.

Growth of Amount paid in Income-tax.

The amounts paid by way of income-tax, under a uniform rate of taxation, show great increase year by year, and afford satisfactory evidences of prosperity. These are quoted with a caution in regard to the figures for 1892 to 1895. The full number of persons properly liable to the tax may not have been ascertained at such time.

	Income-tax paid. £
1892–93	67,367
1893–94	75,238
1894–95	89,891
1895–96	92,778
1896–97	105,504
1897–98	115,210
1898–99	115,480
1899–1900	128,721
1900–1901	173,809
1901–1902	179,397
1902–1903	200,684

The increase from 1895–96 to 1902–1903 is £107,906, being a rate of 116·31 per cent., while the population increased during the same period by 16 per cent.

Taxation by Local Governing Bodies.

The various local bodies levied taxation during the year ended 31st March, 1902, to the amount of £896,824, or £1 2s. 11d. per head of European population. Of the total sum, £548,859 was raised by general rates, £251,612 by special and separate rates, £78,617 by licenses, and £17,736 by other taxes.

Taxation in Australasia.

The following were the amounts and rates of General Government taxation per head of population in Australasia for 1901–1902, specifying the proportions derived from Customs and other taxes :—

State or Colony.	Amount of Revenue raised by Taxation.			Proportion of Taxation from Customs and Excise Duties.
	Customs and Excise.	Other Taxes.	Total.	
	£	£	£	Per Cent.
Queensland	1,297,662	276,771	1,574,433	82·42
New South Wales ..	2,812,722	1,148,942	3,961,664	71·00
Victoria	2,376,483	716,446	3,092,929	76·84
South Australia ..	699,608	267,786	967,394	72·32
Western Australia ..	1,335,114	173,582	1,508,696	88·49
Tasmania	424,443	111,515	535,958	79·19
New Zealand	2,291,349	821,730	3,113,079	73·60

State or Colony.	Rate of Taxation per Head of Mean Population.		
	Customs and Excise.	Other Taxes.	Total.
	£ s. d.	£ s. d.	£ s. d.
Queensland	2 10 10	0 10 10	3 1 8
New South Wales	2 0 9	0 16 1	2 16 10
Victoria	1 19 4	0 11 10	2 11 2
South Australia	1 18 4	0 14 8	2 13 0
Western Australia	6 8 10	0 16 9	7 5 7
Tasmania	2 8 11	0 12 10	3 1 9
New Zealand (excluding Maoris) ..	2 18 8	1 1 0	3 19 8*

* Or, including Maoris, £3 16s. 7¼d. (See remarks on previous page.)

SECTION XXIV.—FINANCE—*continued.*

Subsection C.—Public Debt.

The gross public debt of the colony on the 31st March, 1903, was £55,899,019, an increase of £2,932,572 on the amount owing at the end of the preceding financial year.

Of this increase, £338,700 was devoted to the purchase of lands for settlement; £450,000 was used for purposes of advances to settlers; £278,000 for loans to local bodies; £4,232 for New Zealand Consols deposits; and £52,000 for purchase and development of State coal-mines: making a total of £1,122,932 invested in a directly reproductive manner, outside of money used for railway and telegraph construction, which might almost be considered as of a similar nature.

The following table states the debentures and stock in circulation on 31st March, 1903, under the several Loan Acts or Ordinances of the Colonial and old Provincial Governments, the dates when redeemable, the sinking funds accrued in respect of the same, and the annual charge thereon for interest and sinking fund:—

PUBLIC DEBT ON 31ST MARCH, 1903.

—	Amount outstanding.		Due Date.	Sinking Funds accrued.	Net Indebtedness.	Annual Charge.				Remarks.
						Rate.		Amount.	When payable.	
						Int.	S.F.			
	£	£		£	£	₩ c.	₩ c.	£		
New Zealand Loan Act, 1863...	...	266,300	15 July, 1914	146,492	119,808	5	1	15,978	15 Jan. and 15 July.	
Consolidated Loan Act, 1867...	...	236,400	Ann. drawing	...	236,400	5	...	11,820	Quarterly, 15 Jan., &c.	
Immigration and Public Works Loan Act, 1870	...	*1,000,000	1 June, 1907	756,158	243,842	4	2·4	64 000	1 June and 1 Dec.	Sinking fund payable 13 Mar. and 13 Sept.
Canterbury Loan Ordinance, 1862	3,000 12,200	15,200	2 Jan., 1915 2 July, 1916	14,258	942	6	1	1,120	30 June and 31 Dec.	*Only £200,000 has actually been issued to the public.
Consolidated Loan Act, 1867...	...	13,000	15 April, 1913	...	13,000	4	...	520	15 April and 15 Oct.	
Immigration and Public Works Loan Act, 1870	363,000 27,900	390,900	15 April, 1913 15 April, 1913	... ...	363,000 27,900	4 4½	... ...	14,520 1,256	15 April and 15 Oct. 15 April and 15 Oct.	
Defence and other Purposes Loan Act, 1870	25,000 75,000	100,000	1 July, 1910 15 April, 1913	... ...	25,000 75,000	4½ 4	... ...	1,125 3,000	30 June and 31 Dec. 15 April and 15 Oct.	
General Purposes Loan Act, 1873	17,400 10,800 54,700	82,900	15 Oct., 1913 15 May, 1914 28 Nov., 1914	... ...	17,400 10,800 54,700	4 4 5	... ...	696 432 2,735	15 April and 15 Oct. 15 May and 15 Nov. 15 May and 15 Nov.	† The sinking fund is payable on £2,022,100 (1½ per cent. on £1,402,435, 1 per cent. on £35,225, and ½ per cent. on £584,440); the Land Assurance Fund is also charged with ½ per cent. as a contribution towards sinking fund.
District Railways Purchasing Acts, 1885–86	40,000 97,100	137,100	1 July, 1909 1 April, 1905	... ...	40,000 97,100	6 4	... ...	2,400 3,884	1 April and 1 Oct.	
Government Loans to Local Bodies Act, 1886	...	250,300	1 Sept., 1907	...	250,300	3½	†	33,071	1 Mar. and 1 Sept.	

Consolidated Stock Act, 1877	29,150,302 6,161,167 9,512,997	44,824,466	1 Nov., 1929 1 Jan., 1940 1 April, 1945	... ...	29,150,302 6,161,167 9,512,997	4 3½ 3	... ...	1,166,012 215,641 285,390‡	1 May and 1 Nov. 1 Jan. and 1 July. 1 April and 1 Oct.
Consolidated Stock Act, 1884— Colonial issue ...	272,000 509,500	781,500	1 Sept., 1905 31 Dec., 1907	... ...	781,500	3½	...	27,352	1 Mar. and 1 Sept.
Native Land Purchases Act, 1892 (Renewed under the Aid to Public Works and Land Settlement Act, 1899)	...	125,000	31 Oct., 1906	...	125,000	3½	...	4,375	30 April and 31 Oct.
Land for Settlements Act, 1892 (Renewed under the Land for Settlements Acts Amendment Act, 1899)	...	45,276	31 Oct., 1906	...	45,276	3½	...	1,585	30 April and 31 Oct.
Lands Improvement and Native Lands Acquisition Act, 1894	...	400,000	30 Sept., 1908	...	283,000 117,000	4 3½	... ...	11,320 4,095	31 Mar. and 30 Sept. 31 Mar. and 30 Sept.
New Zealand Consols Act, 1894	...	472,556	1 Feb., 1910	...	472,556	3½	...	16,540	1 Feb. and 1 Aug.
Land for Settlements Acts, 1894, 1897, 1899, and 1900	769,490 349,000 62,000 56,000 10,000 527,950 21,000 412,900 2,100 100,000 161,900 250,000	2,722,340	31 Oct., 1906 1 April, 1909 1 April, 1909 1 April, 1905 1 April, 1906 1 May, 1904 1 Nov., 1904 1 Feb., 1905 1 Feb., 1905 1 Dec., 1906 1 Feb., 1908 1 April, 1904	... ...	769,490 349,000 62,000 56,000 10,000 527,950 21,000 412,900 2,100 100,000 161,900 250,000	3½ 3½ 3½ 4 3½ 4 4 4 3½ 4 4 4	... ...	26,932 13,088 2,170 2,240 350 21,118 840 13,528 73 4,000 6,476 10,000	30 April and 31 Oct. 1 April and 1 Oct. 1 April and 1 Oct. 1 April and 1 Oct. 1 April and 1 Oct. 1 May and 1 Nov. 1 May and 1 Nov. 1 Feb. and 1 Aug. 1 Feb. and 1 Aug. 1 June and 1 Dec. 1 Feb. and 1 Aug. 1 April and 1 Oct.
Carried forward ...	...	51,863,238	...	916,908	50,946,330	...	...	1,989,682	

‡ £89,700 of this amount will be recouped by the Government Advances to Settlers Office.

PUBLIC DEBT ON 31ST MARCH, 1903—*continued.*

	Amount outstanding.		Due Date.	Sinking Funds accrued.	Net Indebtedness.	Annual Charge. Rate. Int.	Rate. S.F.	Amount.	When payable.	Remarks.
	£	£		£	£	₸ c.	₸ c.	£		
Brought forward ...	...	51,863,238	...	916,908	50,946,330	...	...	1,989,682		
Aid to Public Works and Land Settlement Acts, 1896, 1897, 1898, 1899, 1900, 1901, and 1902	500,000	3,430,000	15 Aug., 1921*	...	500,000	3½	...	17,500	15 Feb. and 15 Aug.	* Loan may be paid off at any time after 15th February, 1907, on six months' notice being given. † No interest paid.
	15,000		31 Oct., 1903	...	15,000	3½	...	525	1 Feb. and 1 Aug.	
	150,000		4 Jan., 1904	...	150,000	3½	...	5,250	1 Feb. and 1 Aug.	
	100,000		15 Jan., 1905	...						
	100,000		15 Feb., 1905	...						
	100,000		15 Mar., 1905	...						
	100,000		17 April, 1905	...	500,000	†	...	...	...	
	100,000		15 May, 1905	...						
	100,000		15 June, 1905	...						
	100,000		16 July, 1905	...						
	100,000		15 Aug., 1905	...	300,000	‡	...	10,500	31 Mar. and 30 Sept.	‡ ½ per cent. over bank rate; varying interest, calculated at 3½ per cent.
	465,000		1 April, 1903	...	465,000	4	...	18,600	1 April and 1 Oct.	
	500,000		1 April, 1904	...	500,000	4	...	20,000	1 April and 1 Oct.	
	250,000		1 Dec., 1904	...	250,000	4	...	10,000	1 June and 1 Dec.	
	750,000		1 Dec., 1906	...	750,000	4	...	30,000	1 June and 1 Dec.	
Government Advances to Settlers Act, 1894	...	200,000‡	...	...	200,000	§	...	7,000	...	§ Short-dated debentures since paid off.
Dairy Industry Act, 1898	438	1,781	1 Aug., 1908	...	1,781	3½	...	62	1 Feb. and 1 Aug.	
	843		1 Jan., 1911	...						
	500		1 Jan., 1916	...						
Government Accident Insurance Act, 1898	...	2,000	1 Feb., 1911	...	2,000	3½	...	70	1 Feb. and 1 Aug.	
Local Bodies' Loans Act, 1901	...	350,000	1 Jan., 1909	...	350,000	3½	...	12,520	1 Mar. and 1 Sept.	
State Coal-mines Act, 1901 ...	...	52,000	1 April, 1907	...	52,000	3½	...	1,820	1 April and 1 Oct.	
Add—										
Accrued sinking fund in respect of the Government Loans to Local Bodies Acts	...	...	...	916,908 314,964	54,982,111					‖ Represents the accrued sinking fund held by Public Trustee in respect of the total amount issued under the Government Loans to Local Bodies Acts, of which £1,421,800 has been converted into consolidated stock.
Sinking fund, Government Advances to Settlers Office Account	...	...	...	125,867						
Investments in securities included above on account New Zealand Consols Investment Account	...	...	...	455,500						
Debentures held by Public Trustee as security for stock issued in respect of preferred shares	...	...	...	500,000						
Totals	...	55,899,019¶	...	2,313,239	53,585,780	...	...	2,123,529		¶ Treasury bills amounting to £700,000 are not included.

A condensation of this table shows at a glance the amount of money that will be required in the near future for meeting the liabilities arising at the expiration of the terms of the loans. Taking the position as at present, and dealing with the term of five years 1903–1907, the total sum falling due is found to be £7,430,616.

From the year 1908 onwards to 1921 the amounts becoming due annually are comparatively small.

In 1929 (26 years hence) and from then the bulk of the debt will have to be dealt with—that is, nearly forty-five millions of money out of a total of close on fifty-six millions.

Due Date.	Amount.	Due Date.	Amount.
	£		£
1903	480,000	1916	12,700
1904	1,698,950	1921	500,000
1905	1,640,100	1929	29,150,302
1906	1,799,766	1940	6,161,167
1907	1,811,800	1945	9,512,997
1908	562,338	Annual drawing..	236,400
1909	801,000	Short-dated debentures (since paid off) ..	200,000
1910	497,556		
1911	2,843		
1913	496,300		
1914	331,800		£55,899,019
1915	3,000		

Net Indebtedness: Comparison with Past Years.

The net public debt, after deducting the accrued sinking fund (£2,313,239), was on 31st March, 1903, £53,585,780, an increase of £1,748,149 during the year. More than eight years' revenue, ordinary and territorial, at the present rate would thus be required to pay off the net debt of the colony. The net indebtedness per head of population for 1902–1903 is greater than in 1901–1902 by 2s. 11d. In March, 1890, it stood at £60 5s. 3d.; in 1891, £59 11s. 10d.; in 1892, £59 2s.; in 1893, £58 2s. 7d.; in 1894, £57 8s. 10d.; in 1895, £57 9s. 9d.; in 1896, £60 2s. 4d.; in 1897, £60 13s. 9d.; in 1898, £60 4s. 11d.; in 1899, £61 14s. 4d.; in 1900, £61 17s. 3d.; in 1901, £62 16s. 10d.; in 1902, £65 12s. 4d.; and in 1903, £65 15s. 3d. But, in considering the increase of the amount of debt per head *as a burden on the people*, attention should be given to the remarks following the table showing amounts paid by way of charges of the public debt out of the revenue year by year. Besides these remarks, under the head of "Interest and Sinking Funds" there are others bearing on the subject, given previously, under "Revenue," which is shown to have been relieved substantially since the year 1890.

Years ended 31st March.	Estimated or Census Population.	Amount of Debentures and Stock in Circulation.	Gross Indebtedness per Head of European Population.	Amount of Sinking Fund accrued.	Net Indebtedness.	Net Indebtedness per Head of European Population.
		£	£ s. d.	£	£	£ s. d.
1890 ..	618,657	38,667,950	62 10 1	1,386,185	37,281,765	60 5 3
1891 ..	626,658	38,830,350	61 19 4	1,487,042	37,343,308	59 11 10
1892 ..	637,472	38,713,068	60 14 8	1,037,862	37,675,206	59 2 0
1893 ..	656,187	39,257,840	59 16 7	1,113,770	38,144,070	58 2 7
1894 ..	676,747	39,826,415	58 17 0	951,924	38,874,491	57 8 10
1895 ..	689,475	40,386,964	58 11 6	751,932	39,635,032	57 9 9
1896 ..	703,187	43,050,780	61 4 5	778,891	42,271,889	60 2 4
1897 ..	717,649	44,366,618	61 16 5	814,294	43,552,324	60 13 9
1898 ..	731,713	44,963,424	61 9 0	881,903	44,081,521	60 4 11
1899 ..	746,673	46,938,006	62 17 3	857,279	46,080,727	61 14 4
1900 ..	758,616	47,874,452	63 2 2	944,375	46,930,077	61 17 3
1901 ..	772,719	49,591,245	64 3 7	1,033,494	48,557,751	62 16 10
1902 ..	789,994	52,966,447	67 0 11	1,128,816	51,837,631	65 12 4
1903 ..	814,842	55,899,019	68 12 0	2,313,239*	53,585,780*	65 15 3

* With these figures (taken from the detailed table showing the public debt) the Hon. Colonial Treasurer explained in his Financial Statement that "in addition to the customary deduction made for sinking funds accrued, there had been this year included the accrued sinking funds of the Government Advances to Settlers Act, an item heretofore not shown in the table. The gross debt is also further reduced by taking off the amount of Government securities in which the New Zealand Consols deposits are invested, as both amounts appear in the table of the public debt. For the same reason £500,000 held by the Public Trustee in trust for the payment at maturity of the stock inscribed for the purchase of the preferred shares of the Bank of New Zealand, represented by debentues of like amount issued under 'The Aid to Public Works and Land Settlement Act, 1899,' is also deducted."

The debt of the colony as above stated does not include the unpaid loans raised by the several local bodies, amounting at the end of March, 1902, to £7,839,695, of which sum £5,552,100 was raised outside the colony. These are referred to in dealing with the finance of local bodies.

Increase of Gross Public Debt.

The increase of the gross public debt since the 31st March, 1891, amounts to £17,068,669. A schedule of items composing this sum is subjoined. It shows the purposes to which the money raised has been or is being devoted. The second largest item is £3,190,000 raised for advances to settlers, which represents investments by the Government bearing interest and lent on continually improving security, the principal being repaid by instalments.

Other items which may be considered to represent interest-bearing investments are those under the heads "Land settlement," "Native land purchases," "Loans to local bodies," "Lands improvement," "N.Z. Consols," and "Bank of N.Z. preferred shares."

	£
Gross public debt, 31st March, 1903	55,899,019
" 31st March, 1891	38,830,350
Increase	£17,068,669

	£	£
Native land purchases	649,700	
Land settlement (including Cheviot) ..	3,111,416	
Loans to local bodies	1,697,100	
Lands improvement	500,000	
Advances to settlers	3,190,000	
Bank of N.Z. preferred shares ..	500,000	
N.Z. Consols	472,556	
District railways	47,000	
Public works	6,335,000	
Increase by conversions	666,469	
Sinking fund accretions	1,522,200	
Naval and military settlers	27,226	
Government accident insurance ..	2,000	
Advances to dairy companies ..	1,781	
State coal-mines	52,000	
		18,774,448
Less Redemptions—		
Consolidated Stock Act, 1884, debentures	1,260,420	
Other debentures	445,359	
		1,705,779
Total net increase		£17,068,669

Interest and Sinking Fund.

Of the total amount of outstanding public debt at the end of March, 1903—viz., £55,899,019—more than thirty-four millions sterling bore interest at the rate of 4 per cent., over ten millions sterling at 3½ per cent., and more than nine millions sterling at 3 per cent. The following are the rates of interest payable on the complete public debt:—

Rates of Interest.	Amount at each Rate. £
6 per cent.	55,200
5 per cent.	557,400
4½ per cent.	52,900
4 per cent.	34,504,352
3½ per cent.	349,000
3½ per cent.	10,367,170*
3 per cent.	9,512,997
No interest	500,000
Total	£55,899,019

* Including £500,000 on which the interest paid was ¼ per cent. over bank rate: varying rate, averaging 3½ per cent.

The total amount of *interest* payable to bondholders on the full amount of the public debt as quoted above is £2,072,347, which gives an average rate of £3 14s. 10d. per £100. On the total public debt outstanding on the 31st March, 1891, the average interest charge was £4 10s. 3d. per £100. During the period 1891–1903. therefore, the average rate is found to have declined 17 per cent,

The foregoing refers to interest payable to bondholders only, and has nothing to do with sinking-fund requirements, which are included in the whole annual charge of the public debt.

The *actual payments* during nine years for interest *and sinking fund out of the Consolidated Fund* are shown hereunder, together with the percentage of ordinary and territorial revenue absorbed by the public-debt charges:—

Year ended 31st March	Amounts actually paid for Interest and Sinking Fund out of the Consolidated Fund.					Rate per Head of Mean Population.			Percentage of Revenue absorbed by Public Debt Charges.
	Public Debt.			Treasury Bills.	Total.				
	Interest.	Sinking Fund.	Total.	Interest.					
	£	£	£	£	£	£	s.	d.	
1895 ..	1,619,925	57,979	1,677,904	38,985	1,716,889	2	10	3	38·96
1896 ..	1,602,933	41,183	1,644,116	39,659	1,683,775	2	8	4	36·96
1897 ..	1,630,577	41,858	1,672,435	37,034	1,709,469	2	8	2	35·62
1898 ..	1,668,697	43,380	1,712,077	29,336	1,741,413	2	8	1	34·28
1899 ..	1,689,749	44,651	1,734,400	33,068	1,767,468	2	7	10	33·61
1900 ..	1,674,618	46,073	1,720,691	28,703	1,749,394	2	6	6	31·07
1901 ..	1,671,552	46,364	1,717,916	27,700	1,745,616	2	5	6	29·83
1902 ..	1,722,819	47,724	1,770,543	33,396	1,803,939	2	6	2	29·80
1903 ..	1,817,701	50,464	1,868,165	32,814	1,900,979	2	7	5	29·77

NOTE.—The alteration made in 1894-95 of the system which previously obtained in dealing with the drawing loan of 1867 has affected the comparison of the figures for the last nine years with those preceding. The total amount actually paid for interest and sinking fund in 1889-90 was, under the old system, £1,897,602. The figures for each of the years ended March, 1890 to 1894 inclusive, will be found in the Year-book for 1899.

The above amounts shown as interest and sinking fund do not comprise the whole of the interest and sinking fund paid by the Government in respect of moneys raised by the issue of loans. Thus, in respect of loans raised under the Land for Settlements Acts, the Government Advances to Settlers Acts, and for the purchase of the Cheviot Estate, the interest, although made a charge upon the Consolidated Fund, is recovered from the receipts derived from the leasing of the lands, or from instalments paid by borrowers. The amount of interest thus charged and recovered during last year was £192,206 (under the Land for Settlements Acts, £93,600; Advances to Settlers Act, £89,700; Cheviot Estate, £8,866; Government Accident Insurance Act, £40). Such interest does not become a burden upon the taxpayer, and consequently is not included in the figures upon which the rate per head of mean population is calculated.

The amount actually paid for interest and sinking fund out of the Consolidated Fund during 1902–1903 was £97,040 more than that for the previous year, and the rate of charge per head of population increased somewhat.

The securities in which the sinking funds were held as on the 31st March, 1903, are specified in the statement following:—

STATEMENT of the SECURITIES in which the SINKING FUNDS of the several LOANS were invested on the 31st March, 1903.

Investments in—	£	s.	d.
New Zealand 5-per-cent. Debentures	3,470	0	0
New Zealand 4½-per-cent. Debentures	1,700	0	0
New Zealand 3½-per-cent. Debentures	1,250	0	0
New Zealand 4-per-cent. Inscribed Stock	129,754	19	6
New Zealand 3½-per-cent. Inscribed Stock	2,571	3	7
New Zealand 3-per-cent. Inscribed Stock	270	5	11
New South Wales 4-per-cent. Debentures	20,800	0	0
New South Wales 4-per-cent. Inscribed Stock	5,486	6	7
New South Wales 3½-per-cent. Inscribed Stock	84,269	13	4
New South Wales 3-per-cent. Inscribed Stock	70,673	12	11
Victoria 4-per-cent. Debentures	15,000	0	0
Victoria 4-per-cent. Inscribed Stock	43,233	17	4
Victoria 3½-per-cent. Inscribed Stock	83,341	9	6
Victoria 3-per-cent. Inscribed Stock	27,158	9	10
South Australia 4-per-cent. Debentures	24,700	0	0
South Australia 4-per-cent. Inscribed Stock	4,851	0	5
South Australia 3½-per-cent. Inscribed Stock	38,068	11	6
South Australia 3-per-cent. Inscribed Stock	114,819	12	6
Canada 4-per-cent. Debentures	18,200	0	0
Canada 4-per-cent. Inscribed Stock	60,000	0	0
Canada 3½-per-cent. Inscribed Stock	34,022	11	8
Canada 3-per-cent. Inscribed Stock	33,226	12	3
Canada 2½-per-cent. Inscribed Stock	13,666	15	11
Tasmania 3-per-cent. Inscribed Stock	6,645	15	1
Queensland 4-per-cent. Inscribed Stock	1,433	8	8
Ceylon 3-per-cent. Inscribed Stock	6,000	0	0
Leeds Corporation 3-per-cent. Inscribed Stock	*14,000*	*0*	*0*
Cardiff Corporation 3-per-cent. Inscribed Stock	*24,444*	*1*	*9*
Gold Coast 3-per-cent. Inscribed Stock	*6,511*	*8*	*3*
Reading Corporation 3-per-cent. Inscribed Stock	*6,500*	*0*	*0*
Sheffield Corporation 3-per-cent. Inscribed Stock	*13,000*	*0*	*0*
Aid to Public Works and Land Settlements Act 4-per-cent. Debentures	*330*	*0*	*0*
Land for Settlements Act 4-per-cent. Debentures	*2,510*	*0*	*0*
Local Bodies' Loans Act 3½-per-cent. Debentures	*400*	*0*	*0*
County of Tauranga 5-per-cent. Debentures	60	0	0
Borough of Brunner 6-per-cent. Debentures	840	0	0
Borough of Hokitika 6-per-cent. Debentures	1,860	0	0
Borough of Patea 4½-per-cent. Debentures	200	0	0
Borough of Tauranga 5-per-cent. Debentures	200	0	0
Westport Harbour Board 4-per-cent. Debentures	550	0	0
Waimakariri-Ashley Water-supply Board 5-per-cent. Debentures	320	0	0
Wellington and Manawatu Railway Company 5-per-cent. Debentures	540	0	0
	916,879	16	6
Sinking funds in respect of Local Bodies' Loans Act, 1901, and Government Advances to Settlers Act, 1894—			
Mortgages	67,900	0	0
In common fund, Public Trust Office—			
At 4 per cent. £6,000 0 0			
At 3½ per cent. 366,931 1 2			
	372,931	1	2
	1,357,710	17	8
Cash balance on 31st March, 1903 27 16 3			
Amount overinvested by trustees 25 0 0			
	2	16	3
Total	£1,357,713	13	11

Of the total amount, £540,482 is represented by stock and debentures of the Australian States, and £165,116 by those of Canada and Ceylon; £142,256 was invested in similar securities of the New Zealand Government; £57,944 in inscribed stock of English corporations; £4,030 in debentures of various local governing bodies; other securities, £7,052; £67,900 on mortgage; and £372,931 is in the hands of the Public Trustee.

Flotation of Loans.

Of the gross public debt of the colony outstanding on 31st March, 1903, £47,892,366 was raised in London, £568,100 in Australia, and £7,438,553 in New Zealand; and of the total amount £45,297,022 was held as inscribed stock, and £10,601,997 in the form of debentures. Details are given hereunder:—

Kind of Stock.	Floated in			Total.
	London.	Australia.	New Zealand.	
	£	£	£	£
Debentures ..	3,067,900	568,100	6,965,997	10,601,997
Inscribed stock ..	44,824,466	..	472,556	45,297,022
Total ..	47,892,366	568,100	7,438,553	55,899,019

Prices of New Zealand Stock.

The highest and lowest London prices for the New Zealand 4, 3½, and 3 per cent. stock, taken over a range of fourteen years, are quoted:—

QUOTATIONS, NEW ZEALAND STOCK.

Year.	4-per-cents.		3½-per-cents.		3-per-cents.	
	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.
1888	104½	96¼	..	..	..	..
1889	109¼	99⅝	..	..	..	..
1890	109⅛	102¼	98⅝	93¼	..	..
1891	107½	100	98¼	91⅛	..	..
1892	106⅝	100	98	91½	..	..
1893	107¼	97	97½	90	..	..
1894	109⅞	105⅝	103½	96¼	..	..
1895	113½	105⅝	107½	100	95¾	91
1896	118¼	106½	110⅝	101½	103½	90
1897	117	112⅝	111	104¾	102	99½
1898	116⅞	108	109⅞	103	101½	96½
1899	116½	105½	109	102	99¼	94¼
1900	113¼	109	106¾	103⅜	98½	95¼
1901	115⅜	110¾	109¾	104⅛	99½	93⅛
1902	113¼	109	109½	102½	97	93⅝

Public Debt of Australasia.

The following figures, which, with the exception of those for New Zealand, are taken from Mr. Coghlan's Australasian Statistics, show the public debt of each State or colony in 1901–1902 :—

State or Colony.	Date.	Public Debt.			Debt per Head of Population.
		Fixed Debt.	Floating Debt.	Total.	
		£	£	£	£ s. d.
Queensland ..	30 June, 1902	38,807,427	531,000	39,338,427	76 8 6
New South Wales	30 June, 1902	66,108,359	5,484,126	71,592,485	51 6 0
Victoria ..	30 June, 1901	51,636,275	1,435,000	53,071,275	44 1 5
South Australia ..	30 June, 1902	26,423,045	849,500	27,272,545	75 2 10
Western Australia	30 June, 1902	14,942,310	..	14,942,310	71 14 6
Tasmania ..	31 Dec., 1901	9,095,735	..	9,095,735	52 4 1
New Zealand ..	31 Mar., 1902	52,966,447	..	52,966,447	67 0 11*

* As shown previously (see page 496), the amount of accrued sinking fund reduces this by £1 8s. 7d. per head.

The amount of indebtedness per head of population in June, 1902, in South Australia, Western Australia, and Queensland was thus greater than that for New Zealand in March, 1902.

Public Works in New Zealand.

The burden of a public debt depends greatly on the measure in which it is expended on reproductive works, and on the degree of prosperity enjoyed by the people. The generally rugged character of this country, and the natural difficulties appertaining to the sites of many of the towns, soon necessitated a large outlay on roads and public works. The need was fully recognised, and to some extent met, by the Provincial Governments, which have justly received great credit for their far-seeing and liberal exertions. A great deal of road-making, often of a very costly character, was accomplished, harbour and other improvements begun, and immigration encouraged. Some railways were made in Canterbury, Otago, and Southland. The City of Christchurch and the Canterbury Plains were connected with the Port of Lyttelton by a railway, which required the construction of a long and very costly tunnel through the intervening range of hills. In Otago private enterprise, backed by the guarantee of the Provincial Government, built a railway from Dunedin to Port Chalmers, and some miles of line were made in Southland from the Town of Invercargill into the interior; but no general and comprehensive scheme of public works could be carried out by the separate exertions of the Provincial Governments. In 1870,

therefore, the General Government brought forward its public-works and immigration policy, by which it was proposed to raise a loan of ten millions for the construction of main trunk railways, roads, and other public works of importance to the colony as a whole, as well as for the promotion of immigration on a large scale, the expenditure to be spread over a period of ten years. This policy was accepted by the Legislature, and embodied in "The Immigration and Public Works Act, 1870."

The demands for local railways and other works soon caused the original proposals to be exceeded, and entailed an expenditure at a much more rapid rate and to a far greater amount than was originally contemplated. Although many of the works undertaken have been directly unremunerative, yet the effect of the policy as a whole has been largely to develop the settlement of the country, and to increase enormously the value of landed property; land in parts which before the construction of railways was valued at from £1 to £2 per acre having been subsequently sold at prices varying from £10 to £20 per acre. Moreover, the railway and telegraph lines yield a revenue which covers a large portion of the interest on their cost after paying working-expenses.

Utilisation of Money composing Public Debt.

A statement is supplied, based on figures taken from the Colonial Treasurer's Budget of 1897 (to which the necessary additions have been made), showing the purposes for which the money forming the public debt of the colony was raised or voted.

But the amounts in the items must be regarded as only approximations to the actual facts. The information is merely indicative of the truth, and is a revision of what was given in the Year-book, 1899, which was found to be not as near to correctness as possible in places.

PUBLIC DEBT OF NEW ZEALAND, MARCH, 1903, SHOWING APPROXIMATELY THE AMOUNTS RAISED OR VOTED UNDER VARIOUS HEADS, ARRANGED IN THREE CLASSES.

	On 31st March, 1903.
	£
(*a.*) *Services*—	
Railways	17,960,000*
Lands improvement (roads and bridges)	5,400,000
Public works and buildings	4,160,000
Land-purchases	2,190,000
Immigration	2,460,000
Maori war	2,360,000
Defence	1,840,000
Telegraphs	950,000
Goldfields and coal-mines	780,000
Lighthouses and harbours	520,000
State coal-mines	50,000
Tourist and health resorts	20,000

* NOTE.—Only a portion of expenditure of old Provincial Governments on railways became public debt of the colony. The total expenditure on railways (Provincial and General Government) to 31st March, 1903, was over twenty millions sterling, which includes £1,104,281 spent by the Provincial Governments, of which £82,259 was for the Dunedin and Port Chalmers line.

	£
Investments—	
Advances to settlers	3,000,000
Loans to local bodies	1,980,000
Purchase of lands for settlement	3,110,000
Bank of New Zealand preferred shares ..	500,000
New Zealand Consols	470,000
(*c.*) *Other—* ..	
Deficiencies in revenue, charges and expenses of raising loans, provincial liabilities, miscellaneous expenditure, and unexpended ..	8,145,000

It will be found that on the 31st March, 1903, out of a total debt of £55,899,019, the amounts allocated for services formed approximately the following proportions of the whole :—

	Per Cent.		Per Cent.
For Railways	32·13	For Maori war	4·22
„ Lands improvement (roads and bridges)	9·66	„ Defence..	3·29
„ Public works and buildings	7·44	„ Telegraphs	1·70
„ Land-purchases	3·92	„ Goldfields and coal-mines..	1·40
„ Immigration	4·40	„ Lighthouses and harbours	0·93
		„ State coal-mines.. ..	0·09
		„ Tourist and health resorts	0·04

The total sum is divided into three classes in the table, of which (*a*) is composed of the various services above referred to, and the total of which forms 69·22 per cent. of the whole debt in 1903; class (*b*) consists of moneys devoted to what may be termed investments, being 16·21 per cent. of the total; (*c*) moneys paid away in charges and expenses of raising loans, also to meet deficiencies of revenue, besides old provincial liabilities, and miscellaneous expenditure, forming 12·93 per cent. of the debt, along with unexpended balance of loans raised, 1·64 per cent.

The figures given as to railways do not include all the sums spent by the Provincial Governments, as stated in the note to the table, nor do the figures in some other items agree with those given elsewhere, made up from tables showing the expenditure out of the Public Works Fund, which, as previously explained, is augmented by contributions from the Consolidated Revenue Account.

Expenditure out of the Public Works Fund.

The net expenditure, under all heads, of the Public Works Fund from 1870 to the 31st March, 1903, can be given correctly, but this fund, as stated previously, is not altogether composed of money charged to the public debt. It had received £33,914,187 from loans and £4,369,207 by way of receipts in aid on the latter date. The money received by way of aid included £3,405,000 transferred from the Consolidated Fund during the last twelve financial years, out of surplus revenue. Nearly thirty-eight millions sterling were spent since the year 1870 up to March last, and the items given below exhibit the nature of the works, &c., with amount for each.

NET EXPENDITURE OF PUBLIC WORKS FUND FROM 1870 TO 31ST MARCH, 1903.

Expenditure on—	£
Immigration	2,148,000
Public works, departmental	491,037
Railways, including surveys of new lines	19,261,719
Roads	6,248,248
Land-purchases	1,999,014
Development of goldfields	725,892
Telegraph extension	1,006,465
Public buildings	2,852,705
Lighthouses, harbour-works, and defences	991,353
Contingent defence	733,839
Rates on Native lands	65,268
Thermal springs	14,600
Tourist and health resorts	22,209
Lands improvement	4,090
Charges and expenses of raising loans	1,151,055
Coal-mines	10,835
Interest and sinking fund	218,500
Total	£37,944,829

Expenditure on Railways.

The railway expenditure during each of six quinquennial periods, and for the years ended 31st March, 1901, 1902, and 1903, since the initiation of the public-works policy, has been :—

	£
1st July, 1870, to 30th June, 1875	3,575,362
1st July, 1875, to 31st March, 1880	4,919,712
1st April, 1880, to 31st March, 1885	3,120,680
1st April, 1885, to 31st March, 1890	2,308,319
1st April, 1890, to 31st March, 1895	978,498
1st April, 1895, to 31st March, 1900	1,547,732
1st April, 1900, to 31st March, 1901	717,723
1st April, 1901, to 31st March, 1902	1,333,941
1st April, 1902, to 31st March, 1903	759,752
Total	£19,261,719

New Zealand's expenditure on railways is, with one exception (that of Tasmania) the lowest per head of the population of any of the Australian States. The next table shows the cost of railway-works, the mileage, the average cost per mile, the population, and the cost per head of the population in New Zealand and the several States referred to :—

State or Colony.	Year ended	Cost of Construction of Open Lines.	Average No. of Miles of Line open.	Average Cost per Mile.	Estimated Population	Cost per Head of Population
		£		£		£ s. d
Queensland ..	30 June, 1902	20,119,143	2,801	7,184	510,515	39 8 2
New South Wales	30 June, 1902	40,565,073	2,953	13,407	1,395,600	29 1 4
Victoria ..	30 June, 1902	40,613,784	3,265	12,298	1,206,749	33 13 2
South Australia*	30 June, 1902	14,435,784	1,882	7,670	364,795	39 11 6
West'n Australia	30 June, 1902	7,410,426	1,356	5,465	208,325	35 11 5
Tasmania ..	31 Dec., 1901	3,799,098	459	8,304	174,233	21 16 1
New Zealand ..	31 Mar., 1903	19,081,735	2,262	8,436	857,985	22 4 10†

* Including Northern Territory. † Maoris included.

In the foregoing table the cost per head of population for railway-construction is shown to have been between £33 and £36 in the States of Victoria and Western Australia; over £39 in South Australia and Queensland; in New South Wales it was over £29; but in New Zealand the cost has been £22, and in Tasmania over £21, per head of population.

The Assets Realisation Board.

The Assets Realisation Board was established for the purchase, in connection with the affairs of the Bank of New Zealand, of all the assets of the Estates Company and of the Auckland Agricultural Company.

The General Manager reports that during the year ended 31st March last (1903)—

"The business of the Board in all departments has been satisfactory.

"The results of the year's working, apart from the special £101,135 paid by the Bank in excess of the statutory £50,000, shows full provision for payment of debenture interest, and a clear surplus of £19,660."

Sales to the extent of £138,498 have been made, a decrease of £1,400 over those of the previous year. Of the total value (£138,498), £119,740 represents country, £9,333 town lands, and £9,425 stock, implements, &c., sold on properties finally realised.

The sales for the period 1895–1903, including stock, show a total of £963,678 received.

On 31st March, 1903, the proportion of total sales from time of starting to the book-cost of all estates (£2,731,706) was 35·27 per cent.; and to land-tax valuation, *plus* 10 per cent. for sundry properties, with the manager's valuation for station properties (which together total £1,895,179), it was 50·85 per cent.

Particulars of operations are—

	£
Sales of properties finally realised, 1895–1903 (including stock), (net amount)	484,265
Properties partially realised, 1895–1903	479,413
	£963,678

The book-cost of the estates in respect of which the sales were finally closed was £690,249. These properties are shown above to have realised £484,265, leaving a deficiency of £205,984, including the realisation expenses, &c.

The localities of the sales are as follows :—

	Estates.	Farms.	Town Sections.	Suburban Sections.	£
Auckland ..	5	206	684	270	301,568
Canterbury ..	3	78	19	63	246,059
Hawke's Bay ..	2	..	10	..	104,250
Otago	2	10	565	182	70,729
Marlborough ..	1	4	65	6	20,414
Wellington ..	1	17	31	1	156,631
					899,651
Proceeds: realisation of sundry assets					8,280
Stock sales on properties finally realised					55,747
					£963,678

Special Banking Legislation.

A synopsis of the Banking Acts under which guarantees have been given by the Government of New Zealand will be found on pages 400 to 403 of the Year-book of 1902.

SECTION XXV.—CROWN LANDS.

A SUMMARY of the transactions during the year ended 31st March, 1903, will be found in the following table, which shows under all descriptions of tenure the number of selectors and the area selected :—

Nature and Tenure of Lands selected during the Year ended the 31st March, 1903.	Selectors.	Area. A. R. P.	Number of Purchasers or Selectors.	Area. A. R. P.
Town lands sold for cash	154	168 1 20	371	17,188 2 17
Suburban lands sold for cash	83	273 2 31		
Rural lands sold for cash	134	16,746 2 6		
Occupation with right of purchase			403	118,556 3 6
Lease in perpetuity			285	108,065 1 33
Agricultural lease			3	35 3 37
Village settlement, cash			19	9 1 35
" lease in perpetuity			39	598 2 4
Village-homestead special settlement			34	1,511 3 23
Special settlement associations			29	5,761 0 0
Improved-farm special settlement (lease in perpetuity and occupation with right of purchase)			30	4,031 3 25
Occupation leases, Mining Act			52	2,433 2 5
Small-grazing-runs			35	93,525 1 14
Pastoral runs			129	1,050,779 3 18
Miscellaneous leases and licenses			434	106,859 3 35
Cheviot Estate—				
Lease in perpetuity			2	34 1 0
Grazing-farms			1	6 2 0
Miscellaneous			2	8 0 4
Land for Settlements Acts—				
Cash lands			3	5 0 32
Lease in perpetuity			286	53,645 3 38
Lease in perpetuity, village			1	20 0 0
Small grazing-runs			9	20,393 2 19
Miscellaneous			45	5,890 2 13
Endowments—				
Cash lands			7	83 0 20
Occupation leases, Mining Act			6	51 2 36
Lease in perpetuity			6	1,092 3 39
Small grazing-runs			2	2,641 3 6
Miscellaneous			12	3,411 3 27
Thermal Springs District leases			35	304 3 35
Totals			*2,280	*1,596,949 0 1

* Including thirty-three endowments: area, 7,281 acres 2 roods 8 perches; and thirty five selections under the Thermal Springs Districts Act, comprising 304 acres 3 roods 35 perches.

Particulars of the number of Crown tenants at present holding lands under the several tenures, together with the yearly rental payable, are given in the next statement.

STATEMENT showing the TOTAL NUMBER OF CROWN TENANTS, with Area selected or held, and the Yearly Rent payable, as on the 31st March, 1903.

Tenures.	Total Number of Tenants.	Total Area held by such Tenants.	Total Yearly Rental or Instalment payable.
		A. R. P.	£ s. d.
ORDINARY CROWN LANDS.			
Deferred payment	485	79,664 1 37	3,774 16 8
Perpetual lease	831	161,578 0 11	6,235 19 3
Occupation with right of purchase	3,774	1,016,626 1 31	36,997 13 4
Lease in perpetuity	3,569	1,052,365 2 9	33,976 6 2
Agricultural lease	17	555 1 37	30 19 3
Homestead	3	188 0 37	...
Mining Districts Land Occupation Act	383	15,945 2 9	940 8 4
Village settlements—			
Deferred payment	23	443 1 36	44 15 10
Perpetual lease	153	2,427 1 37	369 19 8
Occupation with right of purchase	38	30 1 4	13 1 2
Lease in perpetuity	460	6,537 0 12	620 5 0
Village-homestead special settlements—			
Perpetual lease	335	5,759 1 7	848 2 11
Lease in perpetuity	692	17,316 3 24	2,453 13 0
Special settlement associations—			
Deferred payment	7	726 1 20	8 1 4
Perpetual lease	23	1,932 3 31	130 13 6
Lease in perpetuity	637	118,357 1 0	6,061 15 3
Improved-farm special settlements	452	48,315 2 31	3,206 2 8
Small grazing-runs	624	1,274,470 0 27	26,070 8 1
Pastoral runs	821	11,510,611 2 37	73,448 18 6
Miscellaneous leases	2,484	491,132 0 22	10,914 10 8
Totals	15,811	15,804,984 2 19	206,146 10 7
CHEVIOT ESTATE—			
Lease in perpetuity	119	24,403 1 9	6,456 5 0
Village-homestead special settlement	72	2,480 1 0	870 0 4
Grazing-farms	48	45,977 2 9	6,624 7 2
Pastoral runs	1	1,642 0 0	193 3 8
Miscellaneous	74	1,525 0 11	290 17 3
LAND FOR SETTLEMENTS ACTS—			
Lease in perpetuity	2,110	346,146 2 14	104,113 7 7
Lease in perpetuity, village	46	448 1 36	341 1 10
Special-settlement associations	11	2,114 1 9	162 7 8
Small grazing-runs	54	90,089 2 16	12,328 4 10
Pastoral runs	2	958 2 38	121 13 0
Miscellaneous	128	8,855 1 24	752 13 5
THERMAL-SPRINGS (ROTORUA)	282	6,059 3 28	1,939 6 4
Grand totals	18,758	16,335,680 3 13	340,339 18 8
Endowments	647	164,860 2 34	8,107 3 8
Native townships	189	583 3 7	786 3 4

Tables I. and II., which follow, exhibit the acreage of land *taken up for settlement*, and the number of holdings under each description of tenure. The lands held under pastoral license and miscellaneous leases, such as for timber and flax-cutting, coal-mining, &c., *are not included* in these tables. Tables III. and IV. show the total acreage taken up year by year since 1893 in each land district, and the number of holdings grouped according to size, the areas varying from less than one acre in extent to 1,000 acres and over.

The forfeitures and surrenders in respect of the lands taken up for settlement (excluding, as already remarked, pastoral and miscellaneous leases) for the last seven years were :—

1896-97	815 holdings	228,978 acres.	1900-1901	354 holdings	106,690 acres.
1897-98	658 "	130,380 "	1901-1902	192 "	75,368 "
1898-99	567 "	180,957 "	1902-1903	329 "	106,390 "
1899-1900	510 "	164,003 "			

Forfeited and surrendered lands are again thrown open for selection as soon as possible, and in the majority of cases are taken up again by fresh selectors within a short time.

A full description of the various tenures under which land is dealt with in the colony is given in the article entitled "The Land System of New Zealand," in Part III. of this book.

I.—Comparative Statement showing Acreage of Lands selected under Settlement Conditions (excluding Pastoral Runs, Miscellaneous Leases and Licenses, and Thermal Springs District Leases) during Each of the Years ended 31st March, 1893-1903.

—	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.	1901-1902.	1902-1903.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cash lands	36,327	34,999	38,695	26,575	28,485	22,525	37,400	23,936	58,700	27,290	17,277
Deferred payments	21,084	12,669	5,454	456	..	..	13	..	..	52	..
Perpetual lease and small areas ..	122,558	3,854	1,263	1,427	9,106	651	640	624	2,499	10	..
Occupation with right of purchase ..	54,271	108,133	75,478	84,968	59,648	81,414	109,950	117,771	262,729	128,893	118,557
Lease in perpetuity	55,320	179,993	91,799	122,350	104,927	117,938	159,415	153,531	144,208	116,445	162,839
Agricultural lease	194	365	45	36	13	258	114	70	23	28	36
Occupation lease under "The Mining Districts Land Occupation Act, 1894"	..	..	..	2,931	2,817	1,285	1,449	2,295	2,123	2,644	2,485
Village settlement—											
Cash	528	2	24	9	4	1	30	4	22	10	9
Deferred payment	391	..	..	..	..	..	..	..	..	..	..
Perpetual lease	2,636	..	..	..	..	..	..	..	..	..	..
Occupation with right of purchase	..	1	23	2	4	2	2	1	..	1	..
Lease in perpetuity	4	3,953	4,050	3,365	1,317	1,426	2,115	1,762	1,082	456	619
Village-homestead special settlement	494	2,550	2,743	793	360	42	134	31	376	469	1,512
Special-settlement associations ..	157,381*	68,852*	*51,346	*44,237	28,084*	*442	*607	*2	..	..	*5,761
Homestead	38	..	..	..	..	..	..	..	..	..	..
Special-settlement improved farms ..	..	..	9,731	28,348	4,882	9,007	4,823	7,393	1,936	1,618	4,032
Small grazing-runs and grazing-farms	92,927	252,693	117,846	46,407	68,934	149,458	77,632	155,109	86,076	128,060	116,567
Totals	544,153	668,064	398,497	361,904	308,581	384,449	394,324	462,529	559,774	405,976	429,694

* Lease in perpetuity.

Note.—The forfeitures and surrenders for the last seven of the years dealt with in the table were—for the year 1896-97, 228,978 acres; 1897-98, 130,380 acres; 1898-99, 180,957 acres; 1899-1900, 164,003 acres; 1900-1901, 106,690 acres; 1901-1902, 75,368 acres; and for 1902-1903, 106,390. But it must not be supposed that these relate to the acreages taken up during the same years; on the contrary, forfeitures may have their origin in selections of long standing and various dates.

II.—Comparative Statement showing Number of Selectors of Land under Settlement Conditions (excluding Pastoral Runs, Miscellaneous Leases and Licenses, and Thermal Springs District Leases) during each of the Years ended 31st March, 1893–1903.

—	1892-3.	1893-4.	1894-5.	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.	1900-1901.	1901-1902.	1902-1903.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
For cash	552	497	392	476	388	272	534	491	363	489	381
Deferred payments	169	96	47	6	..	..	1	..	..	1	..
Perpetual lease and small areas	385	17	3	7	19	2	1	2	3	1	..
Occupation with right of purchase	161	461	398	431	277	380	458	395	673	447	403
Lease in perpetuity	126	612	372	696	659	599	675	647	489	502	579
Agricultural lease	4	5	2	3	2	5	2	3	1	1	3
Occupation lease under "The Mining Districts Land Occupation Act, 1894"	..	..	..	69	48	23	31	64	53	78	58
Village settlement—											
Cash	75	3	23	16	4	2	21	6	35	21	19
Deferred payment	29	..	..	..	..	..	..	..	..	..	..
Perpetual lease	164	..	..	..	..	..	..	..	..	..	..
Occupation with right of purchase	..	5	30	3	4	2	3	3	..	1	..
Lease in perpetuity	2	208	232	193	102	92	106	80	97	33	40
Village-homestead special settlement	33	118	60	19	18	9	12	6	7	30	34
Special-settlement associations	838	290	262	238	142	5	5	1	..	..	29
Homestead	1	..	..	..	..	..	..	..	..	..	..
Improved-farm special settlement	..	..	107	315	45	77	64	41	13	9	30
Small grazing-runs and grazing-farms	39	142	60	32	27	71	40	64	35	48	47
Totals	2,578	2,454	1,988	2,504	1,735	1,589	1,958	1,803	1,769	1,661	1,623

Note.—The forfeitures and surrenders for the last seven of the years dealt with in the table were—for the year 1896-97, 815 holdings; 1897-98, 658 holdings; 1898-99, 567 holdings; 1899-1900, 510 holdings; 1900-1901, 354 holdings; 1901-1902, 192 holdings; and in 1902-1903, 329 holdings. See note to previous table as to the origin of these failures.

III.—Lands taken up under Settlement Conditions during each of the Years ended 31st March, 1894-1903 (exclusive of Pastoral Runs, Miscellaneous Leases and Licenses, and Thermal Springs District Leases).*

Land District.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.	1901-1902.	1902-1903.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland	134,992	99,313	67,831	49,522	56,295	90,160	78,677	201,355	108,761	153,741
Hawke's Bay	24,356	20,141	16,353	22,858	19,876	36,222	36,451	90,625	71,902	38,505
Taranaki	13,954	35,113	55,850	22,002	16,786	18,867	54,960	71,000	23,942	39,353
Wellington	84,871	49,586	79,478	63,801	48,909	63,746	41,387	48,530	14,301	15,048
Nelson	36,739	34,906	19,421	14,462	13,600	18,673	10,211	18,918	29,520	11,289
Marlborough	8,227	18,353	15,858	20,858	54,581	51,973	74,311	33,063	64,624	56,681
Canterbury	94,861	33,744	14,827	22,654	75,041	52,839	34,218	20,744	11,981	4,112
Westland	1,346	1,826	1,765	3,865	437	352	792	709	27,214	45,464
Otago	159,050	80,439	70,238	79,212	77,345	40,599	68,436	49,901	29,232	51,038
Southland	109,668	25,076	20,283	9,347	21,579	20,893	63,086	24,929	24,499	14,463
Totals.. ..	668,064	398,497	361,904	308,581	384,449	394,324	462,529	559,774	405,976	429,694

IV.—Holdings taken up under Settlement Conditions during each of the Years ended 31st March, 1894-1903 (exclusive of Pastoral Runs, Miscellaneous Leases and Licenses, and Thermal Springs District Leases), classified according to Size.

Size.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.	1901-1902.	1902-1903.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 1 acre	176	256	259	154	103	293	345	158	195	187
1 to 50 acres	739	696	719	588	496	571	501	466	569	475
51 to 250 acres	933	757	1,198	709	616	633	492	522	475	498
251 to 500 acres	341	169	232	178	197	277	262	333	245	240
501 to 1,000 acres	150	70	70	84	63	128	116	181	113	158
1,001 acres and upwards ..	115	40	26	22	64	51	87	109	64	65
Totals.. ..	2,454	1,988	2,504	1,735	1,539	1,953	1,803	1,769	1,661	1,623

* See notes as to forfeitures and surrenders on previous tables.

The following is a statement of the gross amounts collected by Receivers of Land Revenue for the years 1901–1902 and 1902–1903 :—

	1901-1902. £ s. d.	1902-1903. £ s. d.
Territorial revenue	249,619 1 6	252,277 15 1
Lands for settlement	90,053 5 6	110,632 8 8
Cheviot Estate	14,061 0 8	14,609 9 9
State forests	17,188 11 5	3,870 14 10
North Island Main Trunk Railway	6,670 14 5	9,396 14 7
Thermal springs	414 8 6	77 4 9
Rotorua Town Council	1,094 2 4	1,846 2 0
Lakes Ellesmere and Forsyth ..	1,615 12 2	1,631 17 10
Crown-grant fees	914 12 5	804 1 6
Native townships	310 8 1	702 2 10
Mining district land occupation ..	641 12 4	911 10 9
Miscellaneous	1,753 17 3	1,550 6 7
Mount Cook Hermitage	190 5 6	..
Hanmer Sanatorium	1,344 1 2	..
Government loans to local bodies..	21,420 15 7	28,301 7 4
Endowments	17,638 9 8	20,053 19 9
Survey vote	2,207 16 1	1,713 19 9
Totals	£427,138 14 7	£448,379 16 0

SECTION XXVI.—LAND FOR SETTLEMENTS.

A FULL description is given, in a special article belonging to Section 1, Part III., of the objects and method of the Land for Settlements Acts, under which the acquirement by Government is authorised, through purchase from private owners, of properties for subdivision into small farms to meet the want felt of Crown lands for disposal in places where they are specially in demand.

The report of the Chairman of the Board of Land Purchase Commissioners on the transactions for the twelve months ended the 31st March, 1903, states:—

About 150 properties were offered for sale, aggregating 740,871 acres. The Board dealt with 108, and recommended the purchase or exchange of 59, containing 404,426 acres.

The Government having approved, negotiations were completed with the owners of 11 estates, containing 29,910 acres, which cost £142,460; and 8 estates, containing 82,696 acres, valued at £208,708, were acquired, but not wholly paid for within the year.

The Arbitration Court sat at Napier on the 29th January, and awarded the Crown 28,857 acres of the Milbourne Estate for £142,262, including costs of one side. The Court also allowed the vendors to retain 600 acres and one homestead. The amount which the Government offered for 29,550 acres was £118,200.

The purchase of 8,542 acres of the Longbush and Tablelands Estate was completed, but the negotiations for taking a portion of the estate, the freehold of which is held by Native owners, failed, the Supreme Court deciding that Native land, although held under a Crown title, could not be taken compulsorily. The value of the purchase is somewhat injuriously affected by this unexpected decision.

The estates wholly paid for during the year are Argyll (Milbourne and Te Reinga), in Hawke's Bay; Spotswood, in Taranaki; Linton, Longbush, and Tablelands, in Wellington; Kokatahi, in Westland; Eccleston, Mead, Chamberlain (Opawa), and Squires, in Canterbury; and Windsor Park (two parts) and Duncan, in Otago.

The total completed purchases for the year comprise 14 estates, containing 69,273 acres, which cost £349,452.

Besides these, negotiations were completed for the Bickerstaffe Estate (Colbeck's), in Auckland; Wigan (Takapau), in Hawke's Bay; Normandale (Western Hutt), in Wellington; Annan (Highfield), in Canterbury; and St. Helen's (Kenton), in Otago. Exchanges were also completed at Birchhill and Awatere, in Marlborough, and Ruangarehu, in Hawke's Bay.

The Levels Estate, containing 38,247 acres, was recommended for purchase and approved by the Government, but, as the owners declined to sell, proceedings were commenced to take the estate compulsorily. Since the close of the year, however, an agreement was arrived at to buy at £6 9s. per acre, and the estate will be taken possession of on the 31st March, 1904.

The Mount Vernon Estate, proceedings to take which compulsorily were commenced some time ago, has not yet been before the Court.

At Birchhill the New Zealand Land Association held freeholds of the best of the land in Mount Patriarch, Raglan, and Manuka Island Runs, and so practically prevented the Crown from leasing the large areas of pastoral country adjacent. The association agreed to sell these freeholds for one block of Crown lands, the advantage being as nearly as possible equal to the Crown and to the association.

SUMMARY OF ALL LANDS OFFERED TO GOVERNMENT UNDER "THE LAND FOR SETTLEMENTS CONSOLIDATION ACT, 1900," AND HOW DEALT WITH, FROM 1ST APRIL, 1902, TO 31ST MARCH, 1903.

Land District where Land situated.	Number of Estates offered.	Area offered.	Area declined without going to Board.	Area not recommended by Board.	Area recommended by Board.	Area under Consideration.	Area withdrawn.	Total.
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland	33	270,435	..	169,566	78,518	22,251	100	270,435
Hawke's Bay	11	36,987	4,074	..	22,548	10,365	1,200	36,987
Taranaki	29	9,752	681	25	306	8,740	..	9,752
Wellington	27	75,681	5,308	15,447	7,370	47,556	..	75,681
Marlborough	1	246	..	..	..	246	..	246
Westland	1	111	..	..	..	111	..	111
Canterbury	23	117,811	7,290	42,018	50,551	17,952	400	117,811
Otago	18	85,480	18,465	..	10,425	56,590	..	85,480
Southland	7	144,368	9,000	..	18,085	117,283	..	144,368
Total	150	740,871	44,818	227,056	187,803	281,094	1,700	740,871

SUMMARY OF ESTATES ACQUIRED UP TO THE 31ST MARCH, 1903, AND AMOUNTS OF PURCHASE-MONEY.

Name of Land District.	No. of Estates acquired before 31st March, 1902.	Areas acquired before 31st March, 1902.	No. of Estates acquired from 1st April, 1902, to 31st March, 1903.	Area acquired from 1st April, 1902, to 31st March, 1903.	Total Numbers of Estates to 31st March, 1903.	Total Area to 31st March, 1903.	Purchase-money.
		A. R. P.		A. R. P.		A. R. P.	£ s. d.
Auckland ..	12	36,949 1 35	2	12,543 1 19	14	49,492 3 14	142,359 14 10
Hawke's Bay ..	11	71,658 2 12	3	46,568 0 19*	14	118,226 2 31	637,342 0 11
Taranaki ..	1	1,505 2 8	1	306 2 25	2	1,812 0 33	46,817 17 2
Wellington ..	8	15,772 3 15	4	10,717 1 10	12	26,490 0 25	185,348 9 4
Marlborough ..	7	68,135 2 0	..	22,480 3 4†	7	90,616 1 4	165,444 5 9
Westland ..	1	3,230 1 6	1	1,879 2 20	2	5,109 3 26	8,343 2 2
Canterbury ..	48	156,755 2 5	5	50,359 2 18	53	207,115 0 23	1,008,877 18 11
Otago	14	60,396 3 15	4	7,177 0 29	18	67,574 0 4	392,821 10 6
Southland ..	5	34,388 0 39	..	..	5	34,388 0 39	88,132 15 9
Totals ..	107	448,792 3 15	20	152,032 2 24	127	600,825 1 39	2,675,487 10 4

* Includes Ruangarehu exchange, 2,380 acres. † Acquired by way of exchange.

At Awatere the Assets Realisation Board held freeholds interspersed with the Crown lands formerly held by them under pastoral lease, and it was arranged that the Board should transfer all its freeholds in one block to the Crown, and the Crown granted the Board all the Crown lands within the other block retained by the Board.

The exchange of Ruangarehu, near Waipiro, consists in the transfer to Mr. J. N. Williams of four small isolated blocks of Crown land, in exchange for about an equal area of his freehold in one block, which is ready for occupation, and is situated on the Tologa–Waipiro inland track.

For workmen's homes and small farms near towns two properties were purchased and opened for lease, with rather disappointing results. The properties purchased last year, and offered for lease during the year, also failed in finding anything like full occupation.

There was a very great desire expressed by the representatives of labour that land should be acquired. At Dunedin, although the principle of providing land for workmen's homes was fully expressed, it was found that very few indeed would definitely state that they would themselves take up any land on the statutory terms if it were offered to them. I believe workmen find it more convenient to live near their work, and that few care to undertake the trouble or cost of living out of town, unless there are frequent rapid and cheap means of communication.

The following is a summary of the transactions under the Land for Settlements Acts to the 31st March, 1903:—

	No.	Area. Acres.	Prime Cost £
Purchased or exchanged and opened for selection	116	497,683	2,250,961
Paid for, but not opened for selection ..	6	42,990	215,818
Purchased, but not paid for nor opened..	5	60,152	208,708
	127	600,825	2,675,487
Under negotiation	17	320,638	1,098,160

The income for the year amounts to £120,967, and the outlay for interest on money borrowed is £93,599. Other outlay is charged to capital. There are also 19,544 acres not yet let, valued at £3,401 yearly, and 8,338 acres taken up by roads and reserves, from which no revenue was derived.

The result of the year's operations shows a profit of £27,369. The accumulated and invested credit balance up to the end of the year is £117,546, besides uncollected rents, on the 31st March last, amounting to £10,489, but a considerable part of which has since been received. The arrears are principally in Taranaki, Hawke's Bay, Wellington, Marlborough, and Southland, the greatest being in Hawke's Bay; but three large estates account for more than half of the whole indebtedness.

The Secretary for Crown Lands and Surveyor-General's report to the Hon. the Minister of Lands on the condition and settlement of the lands acquired and handed over to his department under the above-mentioned Acts gives the particulars of the estates offered for selection as follows:—

During the year the Land Purchase Board transferred to the control of this Department 91,724 acres 2 roods 4 perches, comprised in twelve estates, one homestead site, and portions of the Birch Hill and Awatere freehold properties. The latter were acquired in exchange for Crown lands. Of these, eight estates, one homestead site, and the Awatere and Birch Hill lands, containing in all an area of 49,162 acres and 14 perches, were opened for selection, together with ten other estates comprising an area of 29,639 acres and 15 perches, which had been handed over prior to the 31st March, 1902, but were not ready for settlement on that date. The properties were all surveyed, subdivided, valued, and submitted for lease on carefully considered and designed schemes, and were readily quitted, except the areas noted in the fourth column of the table hereunder.

The five Auckland hamlets were opened as "Workmen's Homes," and are situated in the vicinity of the City of Auckland. The Kumeroa and Forest Gate Estates were acquired under the compulsory provisions of "The Land for Settlements Consolidation Act, 1900," and, notwithstanding, the result may so far be classed as satisfactory. The small Linton Settlement, near Halcombe, was all selected. The Kokatahi Settlement, in Westland, is in a better position than shown, inasmuch as the balance of 1,246 acres have been taken up since the 31st March last. The five Canterbury properties constitute a large proportion of the whole; and of the Lyndon Estate (Amuri) and the Chamberlain (Opawa) Settlement, near Albury, not an acre has been left on the Land Board's hands. The Windsor Park Estates (Otago) all went off.

Given a continuance of the present favourable conditions affecting farming and grazing, it is anticipated that these later acquisitions under the Land for Settlements Act will prove as beneficial and satisfactory to the colony and tenants as the majority of the previous purchases have been.

ESTATES OFFERED for SELECTION during the Year ended 31st March, 1903, under "The Land for Settlements Consolidation Act, 1900."

Land District, and Name of Estate.	Area of Estate.	Number of Selectors.	Area unselected 31st March, 1903.	Annual Rental payable on Lands leased.	Date of Opening.
Auckland—	A. R. P.		A. R. P.	£ s. d.	
Cradock Hamlet ...	33 0 9	3	22 0 25	17 14 0	22 April, 1902.
Hetana Hamlet ...	451 1 34	7	377 1 6	14 5 4	22 April, 1902.
Kitchener Hamlet	26 3 35	1	20 3 14	5 12 0	22 April, 1902.
Methuen Hamlet ...	77 3 14	7	45 2 7	33 17 9	22 April, 1902.
Plumer Hamlet ...	74 0 0	3	54 2 12	10 10 2	22 April, 1902.
Hawke's Bay—					
Kumeroa	3,774 2 38	14	726 0 0	1,425 9 10	12 May, 1902.
Forest Gate ...	8,822 0 0	28	81 2 13	2,587 17 6	19 May, 1902.
Wellington—					
Linton	551 1 36	5	...	309 13 6	17 Sept., 1902.
Westland—					
Kokatahi	1,879 2 20	3	1,246 1 30	100 17 10	4 Nov., 1902.
Canterbury—					
Lyndon No. 2 ...	15,887 0 0	10	...	2,281 10 2	21 April, 1902.
Maytown	391 3 32	12	...	286 16 2	28 April, 1902.
R.S. 30791 (pt.) ...	100 0 0	1	...	17 0 0	23 April, 1902.
Eccleston	1,246 1 5	4	...	569 11 2	12 May, 1902.
R.S. 36226	46 1 26	1	...	5 3 0	16 Oct., 1902.
Mead	5,914 3 17	21	...	975 18 0	21 Jan., 1903.
Chamberlain ...	10,500 1 9	21	...	2,169 19 10	9 March, 1903.
Otago—					
Windsor Park ...	3,821 2 16	38	...	1,655 8 2	28 May, 1902.
Windsor Park (No. 2)	2,179 2 17	10	...	875 16 8	28 Oct., 1902.
Duncan	633 2 3	5	210 0 22	181 16 8	29 Dec., 1902.
Totals ...	56,412 2 31	194	2,784 2 9	13,524 17 9	

The estates, &c., acquired in each district under the Land for Settlements Acts to the 31st March, 1903, are next shown :—

Name of Estate.	Area acquired.	Name of Estate.	Area acquired.
Auckland—	A. R. P.	Hawke's Bay—	A. R. P.
Opouriao	7,604 0 0	Raureka	427 2 0
Okauia	5,920 0 0	Elsthorpe	9,740 0 0
Rangiatea	4,004 0 0	Waimarie	430 2 10
Karapiro	2,334 0 9	Pouparae	337 3 4
Fencourt	7,105 3 5	Tomoana	111 3 38
Whitehall	8,959 0 0	Mahora	1,133 3 0
Cradock Hamlet	33 0 9	Willows	775 1 36
Hetana Hamlet	451 1 34	Hatuma	26,522 3 20
Kitchener Hamlet	26 3 35	Manga-a-toro	19,581 3 12
Methuen Hamlet	77 3 14	Kumeroa	3,774 2 38
Plumer Hamlet	74 0 0	Forest Gate	8,822 0 13
	36,590 0 26		71,658 2 11

Estates, &c., Acquired in each District under the Land for Settlements Acts to the 31st March, 1903—*continued.*

Name of Estate.	Area acquired. A.	R.	P.
Taranaki—			
Tokaora	1,505	2	8
Wellington—			
Paparangi	322	3	32
Ohakea	1,745	1	30
Te Matua	702	0	19
Aorangi	1,785	0	0
Langdale	9,405	0	0
Mangawhata	1,240	2	36
Epuni Hamlet	100	3	14
Maungaraki	470	3	4
Linton	551	1	36
	16,324	1	11
Marlborough—			
Blind River	5,507	0	0
Omaka	3,898	0	0
Puhipuhi	320	0	0
Starborough	35,906	0	0
Richmond Brook	5,854	0	0
Waipapa	3,755	2	0
North Bank	12,895	0	0
	68,135	2	0
Westland—			
Poerua	3,230	1	6
Kokatahi	1,894	2	20
	5,124	3	26
Canterbury—			
Pareora	620	2	13
Studholme Junction ...	109	0	7
Kapua	574	1	22
Rosebrook	600	1	8
Otaio	373	3	14
Patoa	4,535	3	14
The Peaks	2,811	0	9
Roimata	48	3	27
Kereta	105	2	29
Braco	27	2	4
Epworth	21	0	3
Ashley Gorge	1,165	3	6
Omihi Valley	20	0	0
Orakipaoa	384	0	31
Highbank	9,121	3	8
Otarakaro	39	3	9
Wharenui	73	1	10
Rakitairi	3,526	1	26
Waiapi	1,124	2	36
Horsley Down	3,982	3	35
Albury	19,539	1	24
R.S. 1862	20	0	0
" 2682 (part)	6	2	4
" 36469	154	3	2
" 36231	98	3	30
" 36056 and 36057 ...	58	0	16
" 36228	100	3	23
" 36278	618	2	0
" 30791 (part)	100	0	0
" 36226 "	46	1	26
Marawiti	2,028	2	33
Hekeao	2,254	2	11
Pawaho	52	0	18
Waikakahi	48,262	2	34

Name of Estate.	Area acquired. A.	R.	P.
Canterbury—*continued.*			
Tamai	41	0	28
Takitu	9,713	0	37
Pareora No. 2	8,132	0	31
Rautawiri	113	0	7
Papaka	1,561	2	25
Punaroa	7,029	3	5
Lyndon	4,243	3	28
Kohika	3,864	1	10
Tarawahi	31	3	0
Raincliff	745	2	0
Puhuka	39	2	7
Kaimahi	100	2	1
Kapuatohe	49	3	37
Rapuwai	2,247	2	11
Lyndon No. 2	15,887	0	0
Maytown	391	3	32
Eccleston	1,246	1	5
Mead	5,914	3	17
Chamberlain	10,500	1	9
	174,463	1	22
Otago—			
Pomahaka	7,478	2	2
Teanaraki	351	0	39
Tahawai	70	1	35
Maerewhenua	11,163	3	31
Puketapu	509	0	6
Ardgowan	4,268	3	28
Makareao	2,383	0	4
Makareao Extension ...	2,589	2	12
Momona	224	1	16
Toka-rahi	11,259	2	36
Janefield	147	0	2
Elderslie	11,618	2	4
Barnego	7,078	2	1
Earnscleugh	1,269	3	5
Windsor Park	3,821	2	16
Windsor Park No. 2 ...	2,179	2	17
Duncan	633	2	3
	67,047	1	17
Southland—			
Merrivale	9,998	0	0
Otahu	6,153	0	36
Beaumont	4,484	0	4
Ringway	2,253	2	8
Glenham	11,484	2	10
	34,373	1	18

SUMMARY.

Auckland	36,590	0	26
Hawke's Bay	71,658	2	11
Taranaki	1,505	2	8
Wellington	16,324	1	11
Marlborough	68,135	2	0
Westland	5,124	3	26
Canterbury	174,463	1	22
Otago	67,047	1	17
Southland	34,373	1	18
Totals	475,223	0	19

Since the initiation of the policy under "The Land for Settlements Act, 1892," it will be found that, including special purchases to provide homesteads and low country for a few Crown tenants, the number of settlements, exclusive of the Birch Hill and Awatere exchanges, is 116, comprising in all 475,223 acres, and the result is

that 2,335 tenants—or 7,200 souls in all—have been placed upon 447,334 acres, for which they are liable for an annual rental of £116,979. The area absorbed by roads and reserves is 8,338 acres, and on the 31st March last the total area still in the hands of the Land Boards, inclusive of forfeited and surrendered sections, amounted to 19,544 acres, with an estimated annual rental of £3,401, whilst 278 lessees, holding 61,680 acres, were in arrear £10,489. This amount has been since greatly reduced. The holdings which fall back into the hands of the Crown are reopened as expeditiously as possible, and are as a rule promptly taken up, but difficulty is still experienced in quitting portions of some of the Auckland hamlets, the Waipapa Settlement (Marlborough), the Pomahaka and Barnego Settlements (Otago), and the Beaumont and Glenham Settlements (Southland). The Northbank Estate (Marlborough) was held back for mining.

SECTION XXVII.—GOVERNMENT VALUATION OF LAND AND ITS IMPROVEMENTS.

Results of the General Valuation made for March, 1898, and its Revision to March, 1903.

In the year 1896 an Act intituled the Government Valuation of Land Act was passed, providing for the appointment of a Valuer-General, and for the periodical valuation of all land in the colony. The Valuer-General is the Commissioner of Taxes for the time being. The valuations on the district roll are used for the assessment of land-tax, stamp duties, and duties on deceased persons' estates; for local rates, except in places where these are levied on the annual value; also, for the purposes of advances and investments on mortgage of land by the Post Office, Government Insurance Department, Public Trust Office, Government Advances to Settlers Office.

The term "land" means and includes all lands, tenements, buildings, and hereditaments, whether corporeal or incorporeal, and also includes all chattel interests in land.

A certified copy of any entry in the district valuation-roll is supplied by the Department on payment of the prescribed fee.

The district valuation-roll continues in force until a fresh roll is made, but whilst in force it may be altered and amended from time to time. The rolls for rating purposes are supplied to local bodies by the Valuer-General on the request of the local authority. The aim is to insure a standard valuation for taxation, local rating, and loan purposes.

Owners and occupiers dissatisfied with their valuations have the right of objection, the procedure being that laid down by "The Rating Act, 1894," and the regulations under "The Government Valuation of Land Act, 1896."

The cost of making the valuation is divided proportionally between the Departments mostly using it and the local authorities, while separate fees are provided for by regulation for supplying individual valuations to persons requiring them.

The district valuation-roll shows the capital value of the property, of improvements, and the unimproved value of the land.

The surface-value only of gold mines is included, and the value of the Government railways has been excluded.

All land is included, whether occupied or unoccupied, whether owned by private individuals, by the Crown, by Natives, by local authorities, Education Boards, School Commissioners, Churches, corporations, companies, or societies of all kinds, and whether subject to or exempt from taxation or rates.

The result of the general valuation of land as in March, 1898, is given in the report of the Valuer-General, presented to both Houses of Parliament. Since this general valuation a revision has been made in many districts, which brings the figures as corrected to represent the values on the 31st March, 1903. Comparative figures are here given for 1891 and 1903 showing the increase, and stating separately the unimproved value and the value of improvements.

COMPARISON OF CAPITAL VALUES, 1891 AND 1903.

	1891. £	1903. £	Increase, 1891 to 1903. £
Unimproved value ..	75,787,895	103,476,204	27,688,309
Value of improvements	46,365,297	63,373,177	19,007,880
Total ..	122,225,029*	168,849,381	46,624,352*

* In several cases the unimproved value, together with the value of improvements, does not equal the capital value. This is chiefly owing to alterations made by Assessment Courts.

In the figures for the North and South Islands the relative degree of increase is exhibited, and the rapid rate of progress in the North Island shows in strong contrast to that of the other Island. There has been great spread of settlement in the Wellington and Taranaki Districts.

CAPITAL VALUES.

	1891. £	1903. £	Increase. £
North Island ..	57,441,115	92,781,648	35,340,533
South Island ..	64,783,914	76,067,733	11,283,819
Totals ..	122,225,029	168,849,381	46,624,352

The increase for the North Island of £35,340,533 represents an advance of 61·52 per cent. on the value in 1891, and that of £11,283,819, for the South Island, 17·42 per cent. The increase for the whole colony, as shown previously, was £46,624,352, or 38·14 per cent.

The following statement gives the capital value of land and improvements in counties and boroughs as for 1891 and 1903.

CAPITAL VALUE OF LAND AND IMPROVEMENTS IN COUNTIES AND BOROUGHS.

	1891. £	1903. £
Counties	85,818,167	113,126,818
Boroughs	36,406,862	55,722,563
Totals	122,225,029	168,849,381

The increase in the capital value of land, with improvements, in counties for the twelve years is £27,308,651, or 31·82 per cent., while that for boroughs is £19,315,701, or 53·05 per cent.; but the value of property in boroughs was added to between 1891 and 1903 by the constitution of fourteen new boroughs, and that of the counties correspondingly reduced, so that the actual rate of increase in the value of country lands is higher than indicated by the above figures, and in urban lands considerably less.

Comparisons are given in detail in the tables which follow.

COUNTIES, 1891 AND 1903.

TABLE showing the CAPITAL VALUE of LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), in each COUNTY in NEW ZEALAND according to the Results of the General Valuation made in 1891, and that of 1898 corrected to 1903:—

[* No valuation made. R signifies valuation revised.]

County.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As in 1898, revised to 31st March, 1903.	As in Year 1891.	As in 1898, revised to 31st March, 1903.
	£	£	£	£
Mongonui	196,158	226,975	152,151	155,969
Whangaroa	68,825	77,543	41,379	47,241
Bay of Islands	365,069	352,782	247,612	225,908
Hokianga	422,365	414,448	365,957	338,211
Whangarei	523,420	576,783[a]	316,003	332,896[a]
Hobson	325,974	R 430,674	241,880	R 269,548
Otamatea	258,496	R 437,678	156,975	R 263,257
Rodney	293,235	R 328,622	173,313	R 154,260
Waitemata	632,012	R 735,700	388,568	R 400,545
Eden	2,002,677	R 3,027,838	991,380	R 1,530,822
Manukau	1,385,330	R 1,772,701	664,272	R 898,733
Islands (Great and Little Barrier)	55,284	61,732	42,574	39,621
Waiheke, &c. ..	71,343	87,021	40,211	45,005
Waikato	682,774	R 710,103	282,655	R 335,844
Raglan	357,941	R 758,948	280,945	R 474,380
Waipa	464,086	R 721,726	197,900	R 347,719
Kawhia	354,269	473,979	350,051	415,617
Coromandel	217,120	R 334,560	166,483	R 227,311
Thames	253,013	R 382,022	168,442	R 246,075
Ohinemuri	204,704	R 421,284[b]	164,182	R 257,263[b]
Tauranga	282,723	R 398,372	172,078	R 260,183
Piako	689,384	R 995,370[c]	427,889	R 525,878[c]
Rotorua	168,371	479,479	114,289	395,998
Whakatane	663,785	301,724[d]	548,221	257,195[d]
Opotiki	[e]	445,339	[e]	357,019
East Taupo	301,681	299,039	292,106	288,249
West Taupo	235,997	250,205	226,406	224,939
Islands (Mayor and Motiti)	*	5,780	*	3,696
Waiapu	472,548	R 994,630	341,062	R 568,437
Cook	1,885,856	R 3,341,793	1,175,712	R 2,012,676
Wairoa	1,101,072	R 1,383,541	786,032	R 914,450
Hawke's Bay	3,673,889	R 4,209,481	2,558,583	R 3,062,313
Waipawa	2,179,812	R 2,331,424[f]	1,249,695	R 1,426,667[f]
Woodville	[g]	R 727,220	[g]	R 453,501

(a) Exclusive of Borough of Whangarei, which in 1891 formed part of county.
(b) Exclusive of Borough of Waihi, which in 1891 formed part of county.
(c) Exclusive of Borough of Te Aroha, which in 1891 formed part of county.
(d) Exclusive of County of Opotiki, which in 1891 formed part of the County Whakatane.
(e) Formed part of Whakatane County.
(f) Exclusive of the County of Woodville and of Dannevirke Borough, which in 1891 formed parts of the County of Waipawa.
(g) Formed part of Waipawa County.

COUNTIES: CAPITAL VALUE OF LAND, ETC., 1891 AND 1903—*continued.*

[* No valuation made. R signifies valuation revised.]

County.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As in 1898, revised to 31st March, 1903.	As in Year 1891.	As in 1898, revised to 31st March, 1903.
	£	£	£	£
Patangata	1,863,936	R 2,059,947(h)	1,154,909	R 1,490,210(h)
Weber	(i)	R 302,821	(i)	R 162,513
Clifton	441,325	R 772,289	385,252	R 573,097
Taranaki	969,579	R 1,739,941(j)	604,091	R 1,023,220(j)
Egmont	(k)	R 675,032	(k)	R 418,201
Stratford	560,345	R 1,392,315(l)	447,502	R 855,612(l)
Hawera	1,247,436	R 2,783,611(m)	807,887	R 1,866,485(m)
Patea	823,675	R 1,383,409	522,322	R 850,075
Waitotara	731,668	R 1,034,808	460,842	R 696,222
Wanganui	1,176,106	R 1,264,402(n)	830,519	R 875,943(n)
Waimarino	(o)	568,277	(o)	510,522
Rangitikei	1,475,473	R 2,614,639	870,091	R 1,511,584
Kiwitea	(p)	R 1,100,850	(p)	R 651,632
Pohangina	(p)	R 571,303	(p)	R 333,784
Manawatu	810,171	R 1,201,527	445,416	R 858,460
Oroua	2,268,854	R 1,182,392(q)	1,298,417	R 770,963(q)
Kairanga	(p)	R 1,171,374	(p)	R 799,000
Horowhenua	858,648	R 1,433,344	551,248	R 863,864
Islands (Kapiti, Chatham, and Mana)	*	113,541	*	69,216
Pahiatua	511,400	R 1,205,806	331,634	R 665,978
Akitio	(r)1,831,209	R 498,458	(r)1,057,393	R 304,615
Castlepoint ..		R 384,129		R 216,556
Eketahuna ..		R 547,110		R 295,490
Mauriceville ..		R 318,277		R 152,759
Masterton ..		R 1,789,129		R 1,050,020
Wairarapa South	1,872,035	R 1,116,906(s)	1,104,064	R 685,109(s)
Featherston	(t)	R 1,893,261(†)	(t)	R 1,248,600(†)
Hutt	1,030,745	R 1,675,527	520,005	R 884,376
Collingwood	323,910	366,033	223,376	196,233
Waimea	1,196,226	1,310,015(u)	740,668	769,868(u)
Sounds	171,095	R 359,090	124,480	R 213,820
Marlborough	1,837,632	R 2,088,938	1,344,120	R 1,493,794

(h) Exclusive of Weber County, which in 1891 formed part of Patangata County.
(i) Formed part of Patangata County.
(j) Exclusive of the Borough of Inglewood and of a portion of Egmont County, which in 1891 formed parts of Taranaki County.
(k) Formed parts of the Counties of Taranaki and Hawera.
(l) Exclusive of the Borough of Stratford, which in 1891 formed part of county.
(m) Exclusive of the Borough of Eltham, which in 1891 formed part of county; also exclusive of a portion of the Egmont County.
(n) Exclusive of Waimarino County, which in 1891 formed part of the Wanganui County.
(o) Formed part of Wanganui County.
(p) Formed part of Oroua County.
(q) Exclusive of Counties of Kiwitea, Pohangina, and Kairanga, which in 1891 formed parts of Oroua County.
(r) Late Wairarapa North County.
(s) Exclusive of Featherston County, which in 1891 formed part of Wairarapa South County.
(t) Formed part of Wairarapa South County.
(u) Exclusive of Motueka Borough, which in 1891 formed part of county.
(†) Approximate only.

COUNTIES: CAPITAL VALUE OF LAND, ETC., 1891 AND 1903—*continued.*

[* No valuation made. R Signifies valuation revised]

County.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As in 1898, revised to 31st March, 1903.	As in Year 1891.	As in 1898, revised to 31st March, 1903.
	£	£	£	£
Kaikoura	350,521	448,856	209,082	346,401
Buller	651,129	R 711,759	483,407	R 491,271
Inangahua	874,948	864,357	598,963	623,829
Grey	861,890	826,216	670,528	581,881
Westland	1,048,155	825,936	964,461	673,226
Cheviot	486,765	R 706,216	413,852	R 561,290
Amuri	921,221	R 901,422	762,518	R 677,418
Ashley	3,801,341	R 4,096,608	2,861,083	R 3,212,362
Selwyn	7,446,756	R 7,756,749(v)	4,897,419	R 5,424,834(v)
Akaroa	1,169,379	R 1,286,151(w)	775,316	R 941,116(w)
Mount Herbert	(x)	R 211,582	(x)	R 150,398
Ashburton	3,630,383	R 4,631,097	2,691,466	R 3,591,071
Geraldine	3,257,696	R 1,850,259(y)	2,316,183	R 1,425,895(y)
Levels	(z)	R 1,463,208	(z)	R 1,130,315
Mackenzie	736,021	796,073	589,528	641,521
Waimate	2,462,433	R 2,904,617	1,968,587	R 2,412,960
Waitaki	2,709,379	R 2,758,532	2,060,640	R 2,188,661
Maniototo	449,650	568,929	358,342	371,142
Waihemo	417,887	417,749	277,792	276,203
Waikouaiti	602,015	R 687,584	309,077	R 379,259
Peninsula	414,146	435,233	193,301	239,695
Taieri	1,330,718	R 1,472,808	931,554	R 1,040,786
Tuapeka	938,701	R 917,566	642,394	R 611,331
Bruce	957,438	R 997,628	600,771	R 667,620
Clutha	1,151,046	R 1,274,848	772,352	R 843,113
Vincent	791,595	R 460,380	687,287	R 293,707
Lake	382,722	R 339,061	274,791	R 249,289
Fiord	*	131,391	*	124,986
Wallace	1,364,016	R 1,926,518	943,777	R 1,323,037
Southland	3,739,513	R 4,868,546†	2,446,830	R 3,345,270†
Stewart Island	85,021	160,042	79,690	133,880
Islands (Antipodes, &c.) ..	*	13,880	*	13,880

(v) Exclusive of Linwood, Woolston, and New Brighton Boroughs, which in 1891 formed part of county.
(w) Exclusive of Mount Herbert County, which in 1891 formed part of Akaroa County.
(x) Formed part of Akaroa County.
(y) Exclusive of Levels County and Temuka Borough, which in 1891 formed part of county.
(z) Formed part of Geraldine County.
† Exclusive of Borough of Mataura, which in 1891 formed part of county.

BOROUGHS, 1891 AND 1903.

TABLE showing the CAPITAL VALUE of LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), in each BOROUGH in NEW ZEALAND according to the Results of the General Valuation made in 1891, and that of 1898 corrected to 1903.

[R Signifies valuation revised.]

Borough.	Capital Value, Land and Improvements.		Unimproved Value of Land, (included in previous columns).	
	As in Year 1891.	As in 1898, revised to 31st March, 1903.	As in Year 1891.	As in 1898, revised to 31st March, 1903.
	£	£	£	£
Whangarei	(a)	R 147,831	(a)	R 58,954
Birkenhead	77,532	108,533	42,333	49,490
Devonport	407,333	577,939	163,468	242,062
Auckland	4,934,288	R 7,049,904	2,471,496	R 3,696,430
Parnell	366,098	456,523	138,775	191,576
Newmarket	182,353	218,298	82,327	83,975
Grey Lynn (late Newton) ..	222,355	R 461,287	135,607	R 198,921
Onehunga	250,634	282,898	111,406	128,601
Hamilton	90,142	R 156,809	44,584	R 69,284
Cambridge	70,279	85,930	25,521	27,360
Thames	227,171	232,902	76,547	91,437
Tauranga	63,026	86,590	25,153	29,267
Te Aroha	(b)	55,757	(b)	24,189
Waihi	(c)	R 187,340	(c)	R 64,587
Gisborne	317,989	R 515,774	148,511	R 311,297
Napier	1,275,853	1,289,457	667,157	585,955
Hastings	372,458	R 567,460	230,592	R 320,256
Dannevirke	(d)	153,331	(d)	81,405
Woodville	102,226	98,037	57,852	43,824
New Plymouth	341,117	R 966,861	165,621	R 616,768
Hawera	84,834	R 328,239	37,914	R 178,725
Patea	43,378	R 64,291	12,055	R 22,000
Stratford	(e)	R 270,537	(e)	R 161,215
Eltham	(f)	R 171,130	(f)	R 98,105
Inglewood	(g)	91,445	(g)	33,175
Wanganui	543,403	R 1,330,648	290,321	R 854,898
Marton	83,915	116,287	33,736	40,507
Feilding	146,884	R 331,954	68,199	R 167,520
Palmerston North ..	489,618	R 815,676	310,293	R 353,506
Foxton	85,743	R 121,247	39,755	R 61,362
Onslow	144,053	R 277,826	70,803	R 150,589
Karori	118,728	R 321,347	74,595	R 211,012
Wellington	5,865,778	R 10,935,689	3,440,182	R 6,590,278
Melrose(h)	203,517	R 609,582	129,429	R 355,125
Pahiatua	(i)	R 148,970	(i)	R 71,737
Masterton	356,860	R 636,040	159,861	R 339,566
Carterton	88,650	R 163,996	31,315	R 82,332
Greytown	115,649	R 146,912	34,095	R 57,580
Lower Hutt	244,075	R 419,631	159,178	R 254,403
Petone	268,358	R 489,799	145,221	R 253,683

(a) Formed part of Whangarei County.
(b) Formed part of Piako County.
(c) Formed part of Ohinemuri County.
(d) Formed part of Waipawa County.
(e) Formed part of Stratford County.
(f) Formed part of Hawera County.
(g) Formed part of Taranaki County.
(h) Now Melrose Ward of Wellington City.
(i) Formed part of Pahiatua County.

BOROUGHS: CAPITAL VALUE OF LAND, ETC., 1891 AND 1903—*continued.*

[R signifies valuation revised.]

Borough.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As in 1898, revised to 31st March, 1903.	As in Year 1891.	As in 1898, revised to 31st March, 1903.
	£	£	£	£
Richmond	84,285	87,431	43,375	46,268
Nelson	942,370	861,873	389,397	348,276
Picton	88,195	R 109,527	41,189	R 52,340
Blenheim	378,943	R 306,721	167,481	R 133,744
Motueka	(j)	98,345	(j)	52,690
Westport	166,987	199,899	57,782	82,584
Greymouth	299,077	R 370,260	114,543	R 97,142
Brunner	115,892	70,330(p)	16,166	11,539(p)
Kumara	33,565	37,552	6,945	5,581
Hokitika	102,708	R 167,857	18,054	R 66,068
Ross	16,961	R 20,975	5,250	R 5,382
Rangiora	158,017	186,968	71,161	74,945
Kaiapoi	134,055	163,891	47,023	48,475
St. Albans(k)	524,822	R 895,761	284,938	R 365,087
Christchurch	3,403,566	R 4,534,565	1,820,770	R 2,279,807
Sydenham(l)	821,060	869,040(s)	333,876	288,304(s)
Linwood(m)	(n)	546,659	(n)	171,361
Woolston	(n)	234,877	(n)	99,758
New Brighton	(n)	100,081	(n)	46,245
Sumner	102,145	R 132,953	60,246	R 66,832
Lyttelton	851,730	850,949	150,490	238,912
Akaroa	49,407	54,323	19,628	17,738
Ashburton	223,091	260,688	90,733	97,285
Temuka	(q)	111,941	(q)	32,130
Timaru	442,830	R 866,357	151,661	R 323,560
Waimate	75,399	R 140,298	18,759	R 51,658
Oamaru	612,571	R 522,507	279,113	R 179,307
Hampden	13,195	R 21,157	5,229	R 7,460
Naseby	24,186	33,939	2,440	4,169
Palmerston	51,182	R 56,446	16,771	R 14,309
Hawksbury	45,716	R 60,000	19,823	R 28,555
Port Chalmers	200,043	234,988	60,946	61,456
West Harbour	137,015	135,144	68,240	61,675
North-east Valley ..	276,835	280,651	130,271	106,409
Maori Hill	142,890	R 201,009	67,348	R 86,573
Roslyn	360,962	R 587,118	169,610	R 249,816
Mornington	284,875	326,438	125,414	113,978
Dunedin	4,193,422	R 5,452,589	2,124,467	R 2,605,199
Caversham	466,074	497,422	217,158	189,222
South Dunedin	223,534	R 350,372	82,609	R 103,970
St. Kilda	118,477	R 194,406	76,842	R 97,773
Green Island	36,962	R 39,396	13,585	R 11,234
Mosgiel	122,625	R 157,583	53,441	R 65,200

(j) Formed part of Waimea County.
(k) Now St. Albans Ward of Christchurch City.
(l) Now Sydenham Ward of Christchurch City.
(m) Now Linwood Ward of Christchurch City.
(n) Formed part of Selwyn County.
(p) Value of coal-mines excluded.
(q) Formed part of Geraldine County.
(s) Value of railway-station (£80,000), included in 1891, excluded in 1898.

BOROUGHS: CAPITAL VALUE OF LAND, ETC., 1891 AND 1903—*continued.*

[R signifies valuation revised.]

Borough.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As in 1898, revised to 31st March, 1903.	As in Year 1891.	As in 1898, revised to 31st March, 1903.
	£	£	£	£
Roxburgh	20,123	30,535	3,167	3,438
Lawrence	79,066	98,147	18,584	23,184
Tapanui	16,155	16,174	2,575	2,550
Milton	76,207	R 142,756	14,012	R 38,886
Balclutha	53,210	R 93,530	14,547	R 32,829
Kaitangata	54,976	62,464	21,133	28,081
Arrowtown	24,586	27,233	5,012	4,754
Queenstown	65,153	69,663	13,524	12,562
Cromwell	22,168	37,734	4,658	9,196
Alexandra	13,578	45,713	2,955	10,257
Gore	142,708	R 280,600	66,171	R 104,833
Mataura	(t)	R 123,232	(t)	R 50,011
Winton	20,195	R 48,856	7,965	R 19,613
Gladstone	26,541	39,105	13,825	16,060
Avenal	15,269	27,089	6,687	8,441
North Invercargill ..	28,293	41,586	15,640	17,169
East Invercargill	42,996	58,279	18,385	17,615
Invercargill	959,140	R 1,215,162	517,879	R 500,010
South Invercargill ..	79,526	R 117,702	42,813	R 44,922
Riverton	59,626	60,779	22,024	15,206
Campbelltown	97,380	164,231	49,430	75,721

(t) Formed part of Southland County.

LOCAL DISTRICTS, 1903.

TABLE showing the CAPITAL VALUE of LAND with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), in each RIDING, ROAD DISTRICT, and TOWN DISTRICT in NEW ZEALAND according to the results of the General Valuation made in 1898, revised to 1903.

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Mongonui County—				
Kaitaia ..	..	..	52,484	35,084
Mongonui ..	..	..	37,553	24,265
Hohoura ..	..	..	39,615	23,343
Herekino ..	..	..	30,923	28,021
Victoria Valley ..	..	..	24,836	14,382
Ororu ..	..	..	41,564	30,874
Total of county	..	..	£226,975	£155,969

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Whangaroa County—				
Whangaroa ..	..	..	25,328	15,512
Totara ..	..	..	20,262	12,705
Kaeo ..	..	..	31,953	19,024
Total of county	..	..	£77,543	£47,241
Bay of Islands County—				
Waimate ..	..	..	109,295	65,368
Russell ..	..	..	46,150	33,794
Kawakawa ..	..	..	73,502	34,886
Pakaraka ..	..	..	123,835	91,860
Total of county	..	..	£352,782	£225,908
Hokianga County—				
Whangape ..	..	..	60,333	50,653
Kohukohu ..	..	..	55,077	41,573
Waihou ..	..	..	67,498	61,204
Tahaka ..	..	..	62,450	57,166
Horeke ..	..	..	21,835	17,519
Rawene ..	..	..	30,040	18,773
Omapere Waipoua	..	..	117,215	91,323
Total of county	..	..	£414,448	£338,211
Whangarei County—				
Otonga	Otonga ..	..	18,703	8,489
	Outlying ..	..	30,182	20,479
Kiripaka ..	Marua ..	..	29,931	21,798
	Outlying ..	..	36,537	25,351
Hikurangi ..	Hikurangi ..	..	38,996	24,778
	Kaurihohore ..	..	18,962	6,392
	Outlying ..	..	17,577	11,725
Wairua ..	..	Kamo ..	22,453	7,872
	Outlying ..	..	60,892	30,957
Maunu ..	Maunu ..	..	72,238	42,613
	Outlying ..	..	46,322	33,696
Manaia ..	Whareora ..	..	9,627	4,929
	Parua ..	..	23,318	11,346
	Outlying ..	..	23,516	14,122
Mangapai ..	Maungakaramea ..	..	25,468	10,194
	Ruarangi ..	..	11,700	6,162
	Waikiekie ..	..	24,445	15,159
	Outlying ..	..	14,249	8,087
Waipu	Waipu North ..	..	16,813	8,101
	Outlying ..	..	39,854	20,646
Total of county	..	..	£576,783	£332,896

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Hobson County—			£	£
Dargaville ..	..	..	54,115	26,605
Kaihu ..	..	..	43,225	33,768
Tangowahine ..	..	..	85,057	78,494
Wairoa ..	..	..	53,357	42,620
Okahu ..	..	..	47,382	22,291
Aratapu ..	..	..	74,686	27,980
Te Kopuru ..	..	..	72,852	37,790
Total of county	..	..	£430,674	£269,548
Otamatea County—				
Tokatoka ..	..	..	109,508	73,274
Matakohe ..	Matakohe ..	..	50,461	32,731
	Outlying ..	..	14,060	8,965
Mareretu ..	..	..	26,113	13,845
Paparoa ..	..	..	48,968	22,666
Wairau ..	..	..	49,735	26,933
Whakapirau ..	Whakapirau ..	..	70,874	44,411
Kaiwaka ..	Mangawai ..	..	25,886	14,289
	Outlying ..	..	42,073	26,143
Total of county	..	..	£437,678	£263,257
Rodney County—				
Albert ..	Albertland North	..	7,046	4,493
	Mainene ..	..	7,083	3,823
	Albertland South	..	27,132	8,628
	Wharehine ..	..	13,474	7,649
Hoteo ..	..	..	42,140	20,890
Tauhoa ..	Tauhoa ..	..	25,862	10,979
	Komokoriki ..	..	11,997	6,893
	Ahuroa ..	..	5,703	3,563
Omaha ..	Omaha ..	..	36,011	20,944
Matakana ..	Matakana West ..	..	17,501	6,459
	Matakana East ..	..	9,200	5,378
	Eastern Mahurangi	..	11,373	4,694
Mahurangi ..	Upper Mahurangi	..	35,048	15,126
	Warkworth ..	..	43,879	15,510
Puhoi ..	Puhoi	..	35,173	19,231
Total of county	..	..	£328,622	£154,261
Waitemata County—				
Mairetahi ..	..	Helensville ..	27,392	5,143
	Outlying ..	..	76,557	37,948
Kaukapakapa ..	Kaukapakapa ..	..	47,787	26,596
Kumeu ..	..	..	41,304	23,646
Wainui ..	Whangaparoa ..	..	7,856	3,941
	Pukeatua ..	..	29,832	17,791
	Outlying ..	..	30,085	14,356

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Waitemata County—*continued.*			£	£
Takapuna ..	..	..	150,982	87,365
Birkenhead ..	..	..	36,584	20,807
Northcote ..	..	..	86,431	42,516
Waitakerei ..	..	..	93,958	58,144
Waikomiti ..	..	..	106,932	62,352
Total of county			£735,700	£400,545
Eden County—				
Newton ..	Arch Hill ..	..	103,623	40,466
Grafton ..	Eden Terrace ..	..	127,369	43,346
Whau ..	Point Chevalier ..	..	118,649	27,114
	Mount Albert ..	..	257,626	118,746
	Avondale ..	..	141,595	70,150
	Mount Roskill ..	..	171,049	115,736
Epsom ..	Mount Eden ..	..	655,856	253,802
	Epsom ..	..	234,121	125,680
	One Tree Hill ..	..	316,143	199,454
Parnell ..	Remuera ..	..	563,310	329,375
	Orakei ..	..	10,896	9,322
Tamaki ..	Tamaki West ..	..	128,609	86,179
	Panmure Township	..	15,248	4,306
	Mount Wellington	..	183,744	107,146
Total of county	..	..	£3,027,838	£1,530,822
Manukau County—				
Awhitu ..	Awhitu ..	..	38,549	18,884
	Pollock Settlement	..	14,536	6,815
Waiuku ..	Waipipi ..	..	148,087	75,687
	Waiuku ..	..	74,476	39,256
Howick ..	Pakuranga ..	..	60,840	44,613
	Howick Township	..	15,861	6,029
	Paparoa ..	..	22,334	11,108
	East Tamaki ..	..	108,211	53,351
	Turanga ..	..	27,324	12,070
	Maraetai ..	..	12,625	6,933
Otahuhu ..	Otahuhu ..	..	105,101	51,076
	Mangere ..	..	200,348	119,188
	Papatoitoi ..	..	60,231	39,860
	Manurewa ..	..	36,608	20,109
Papakura ..	Papakura ..	..	70,900	36,726
	Wairoa ..	..	96,266	46,959
	Drury ..	..	48,921	21,866
		Papakura ..	22,246	6,415
	Hunua ..	..	25,439	16,832
Pukekohe ..	Mauku ..	..	56,745	29,658
	Karaka ..	..	36,969	19,313
	Pukekohe West ..	..	150,808	70,569

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Manukau County—*continued.*			£	£
Pukekohe—*contd.*	Pukekohe East ..	..	126,671	54,033
	Opaheke ..	..	41,356	18,989
	Paparata ..	..	39,639	17,482
	Pokeno ..	..	35,366	17,636
Maungatawhiri ..	Maungatawhiri ..	..	28,814	12,758
	Mercer ..	..	18,849	8,755
	Outlying ..	..	48,581	40,412
Total of county	..	..	£1,772,701	£898,733
Islands—				
Great Barrier ..				
Little Barrier ..	..	..	61,732	39,621
Kawau ..				
Motuhora ..				
Moturoa ..				
Motutikatika ..				
Mokohinau ..				
Taranga ..				
Week's Island ..				
Tiritiri ..	..	..	87,021	45,005
Waiheke ..				
Motutapu ..				
Poñui ..				
Rangitoto ..				
Motuihi ..				
Cuvier ..				
Great Mercury ..				
White ..	..	..	Not	valued.
Whale ..				
Total of islands	..	..	£148,753	£84,626
Waikato County—				
Whangamarino ..	Whangamarino ..	..	98,502	56,991
Huntly ..	Huntly ..	..	92,481	55,147
Kirikiriroa ..	Kirikiriroa ..	..	270,668	100,619
Tamahere ..	Tamahere ..	..	88,064	42,480
Cambridge ..	Cambridge ..	..	160,388	80,607
Total of county	..	..	£710,103	£335,844
Raglan County—				
Onewhero ..	..	..	149,853	91,293
Whangape ..	..	..	167,345	106,948
Waingaro ..	..	..	134,086	73,706
Te Akau ..	Te Akau ..	..	108,029	87,858

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Raglan County—*continued.*			£	£
Karioi ..	..	..	62,702	33,101
Whaingaroa ..	..	..	60,538	31,815
Karamu ..	Karamu ..	..	28,240	17,799
	Outlying ..	..	14,927	10,688
Pirongia ..	..	..	33,228	21,172
Total of county	..	..	£758,948	£474,380
Waipa County—				
Newcastle ..	Newcastle ..	..	78,825	43,072
	..	Ngaruawahia ..	20,593	5,774
Hamilton ..	..	..	97,442	50,468
Tuhikaramea ..	Tuhikaramea ..	..	45,154	25,907
Pukekura ..	Pukekura ..	..	182,678	91,154
Mangapiko ..	..	..	125,919	56,877
Rangiaohia ..	Rangiaohia ..	..	124,131	57,826
	..	Te Awamutu ..	31,181	11,616
	..	Kihikihi ..	15,803	5,025
Total of county	..	..	£721,726	£347,719
Kawhia County ..	..	..	£473,979	£415,617
Coromandel County—				
Harataunga ..	..	..	253,685	168,971
Mercury Bay ..	..	..	80,875	58,340
Total of county	..	..	£334,560	£227,311
Thames County—				
Hastings ..	..	..	74,131	59,498
Kauaeranga ..	..	..	48,453	15,486
Parawai ..	..	..	42,333	17,750
Totara ..	..	..	217,105	153,341
Total of county	..	..	£382,022	£246,075
Ohinemuri County—				
Waitoa ..	..	..	80,666	66,411
Paeroa ..	..	..	206,803	114,511
Waitekauri ..	..	..	56,465	38,316
Karangahake ..	..	..	77,350	38,025
Total of county	..	..	£421,284	£257,263
Tauranga County—				
Katikati ..	Katikati ..	..	60,036	38,154
	Outlying ..	..	18,955	17,084
Te Puna ..	Te Puna ..	..	39,666	30,134

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Tauranga County—*continued.*			£	£
Te Puna—*continued.*	Outlying .. / Te Puna Township	..	1,759	879
Waimapu ..	..	..	87,849	57,534
Maketu ..	Te Puke .. / Outlying ..	..	86,656 / 103,451	53,346 / 63,052
Total of county	..	..	£398,372	£260,183
Piako County—				
Waitoa ..	Waitoa ..	..	424,291	210,619
Te Aroha ..	..	..	85,836	52,795
Matamata ..	Matamata ..	..	163,450	89,615
Taotaoroa ..	..	..	54,981	32,799
Patetere ..	..	..	266,812	140,050
Total of county	..	..	£995,370	£525,878
Rotorua County—				
North ..	..	..	233,239	188,429
South ..	..	..	246,240	207,569
Total of county	..	..	£479,479	£395,998
Whakatane County—				
Matata ..	..	..	98,931	89,984
Omataroa ..	..	..	62,869	43,401
Opouriao ..	..	..	108,828	98,194
Waimana ..	..	..	31,096	25,616
Total of county	..	..	£301,724	£257,195
Opotiki County—				
Waioeka ..	..	..	386,600	328,057
Ohiwa ..	..	..	23,732	15,220
Opotiki	..	Opotiki ..	35,007	13,742
Total of county	..	..	£445,339	£357,019
East Taupo County	..	..	£299,039	£288,249
West Taupo County	..	..	£250,205	£224,939
Mayor and Motiti Islands	..	..	£5,780	£3,696

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value. Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Waiapu County—				
Matakaoa ..	..	..	93,352	78,608
Awanui ..	..	..	86,370	61,678
Piritarau ..	..	..	297,127	162,944
Waipiro ..	..	..	251,579	130,493
Tokomaru ..	..	..	266,202	134,714
Total of county	..	..	£994,630	£568,437
Cook County—				
Tolago ..	..	..	495,778	282,045
Waikohu ..	Waikohu ..	..	363,267	220,819
	Waipaoa ..	..	137,429	70,543
	Ngatapa ..	..	426,194	271,747
Waimata ..	Waimata ..	..	234,722	125,924
	Pouawa ..	..	178,322	97,277
Gisborne ..	Ormond ..	..	77,876	47,411
	Poverty Bay ..	..	235,379	167,424
	Taruheru (Subdivisions 1, 2)	..	80,763	57,510
	Taruheru (Subdivision 3)	..	52,135	25,788
Whataupoko ..	Whataupoko ..	..	117,688	49,018
	Kaiti ..	..	102,683	60,460
	Titirangi ..	..	33,679	27,066
Patutahi ..	Patutahi ..	..	222,766	141,228
Hangaroa ..	Hangaroa ..	..	71,548	42,848
	Aroha ..	..	75,787	40,234
	Outlying ..	..	106,842	78,201
Arai	Arai ..	..	328,935	207,133
Total of county	..	..	£3,341,793	£2,012,676
Wairoa County—				
Waikaremoana ..	..	..	617,233	403,407
Clyde ..	..	Clyde ..	58,190	29,344
	Outlying ..	..	280,473	184,876
Mohaka ..	..	..	427,645	291,823
Total of county	..	..	£1,383,541	£914,450
Hawke's Bay County—				
Petane ..	..	..	331,192	215,589
Puketapu ..	..	..	451,500	312,613
Okawa ..	..	..	604,650	428,836
Meanee ..	..	Taradale ..	67,118	34,041
	Outlying ..	..	201,997	128,310
Erehwon ..	..	..	212,150	181,065
Maraekakaho ..	..	..	450,544	313,341
Heretaunga ..	..	..	781,685	586,211
Clive	..	..	376,956	294,591
Havelock ..	..	..	731,689	567,716
Total of county	..	..	£4,209,481	£3,062,313

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Waipawa County—				
Waipawa ..	North Ruataniwha	..	301,116	183,396
	Waipawa ..	..	62,293	40,279
	..	Waipawa ..	74,232	27,844
Ruataniwha ..	Takapau ..	..	251,659	152,957
	Outlying ..	..	463,299	260,651
Waipukurau ..	Waipukurau ..	..	372,663	253,372
Norsewood ..	Norsewood ..	..	172,720	92,883
Ormondville ..	..	Ormondville ..	30,989	7,477
	Outlying ..	..	100,387	59,268
Dannevirke ..	..	..	502,066	348,540
Total of county	..	..	£2,331,424	£1,426,667
Woodville County—				
Woodville ..	..	..	178,894	105,674
Maungaatua ..	..	..	159,142	109,232
Kumeroa ..	..	..	215,553	122,816
Maharahara ..	..	..	173,631	115,779
Total of county	..	..	£727,220	£453,501
Patangata County—				
Patangata ..	Patangata ..	..	171,064	118,790
	..	Kaikora North	26,007	11,293
Oero ..	Oero	..	371,737	235,715
Taumumu ..	Taumumu ..	..	600,164	444,454
Eparima ..	Wanstead ..	..	147,963	107,015
	Wallingford ..	..	379,968	265,399
Porangahau ..	Porangahau ..	..	363,044	257,544
Total of county	..	..	£2,059,947	£1,490,210
Weber County—				
Weber ..	..	..	98,248	54,041
Titree Point ..	..	..	85,305	49,208
Wimbledon ..	..	..	119,268	59,264
Total of county	..	..	£302,821	£162,513
Clifton County—				
Mokau ..	..	..	380,473	323,144
Urenui ..	..	..	103,654	66,606
Tikorangi ..	..	..	76,624	45,923
Waihi ..	..	..	79,920	57,135
Ngatimaru ..	..	..	131,618	80,289
Total of county	..	..	£772,289	£573,097

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Taranaki County—			£	£
Waitara ..	Waitara West ..	..	188,186	103,920
	..	Raleigh ..	47,605	19,157
	Egmont ..	..	135,877	78,926
	Henui ..	..	115,668	79,471
Moa ..	Moa ..	..	462,572	230,577
	Mangorei ..	..	53,339	34,476
	Waiwakaiho ..	..	71,301	38,940
Omata ..	Elliott ..	..	55,395	39,083
	Carrington ..	..	99,808	64,566
	Frankley ..	..	72,986	45,501
	Barrett ..	..	114,390	76,671
	Omata ..	..	90,611	63,919
	Upper Hurford ..	..	14,648	8,627
	Tataraimaka ..	..	36,740	21,383
	Oakura ..	..	77,216	50,983
	Okato ..	..	80,357	47,255
	Outlying)* ..	..	23,242	14,765
Total of county	..	..	£1,739,941	£1,023,220
Stratford County—				
North ..	Manganui ..		311,071	173,704
East	..	..	651,571	407,705
West	..	..	212,800	133,977
South.. ..	..	..	216,873	140,226
Total of county	..	..	£1,392,315	£855,612
Egmont County—				
Rahotu ..	Parihaka ..	..	372,056	236,380
Opunake ..	..	Opunake ..	48,143	23,850
Oeo	..	..	254,833	157,971
Total of county	..	..	£675,032	£418,201
Hawera County—				
Waimate ..	Waimate ..	..	810,406	540,571
	..	Manaia ..	39,850	14,078
Mangatoki ..	..	..	344,910	229,927
Okaiawa ..	..	..	256,278	188,642
Eltham ..	..	..	272,624	168,347
Hawera ..	..	Normanby ..	27,289	11,008
	Outlying ..	..	757,997	528,046
Mokoia ..	..	..	274,257	185,866
Total of county	..	..	£2,783,611	£1,866,485

* Formerly part of Parihaka Road District.

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Patea County—			£	£
Otoia ..	Patea West ..	..	361,430	230,183
	Patea East ..	..	210,772	138,714
	Outlying ..	..	5,514	5,514
Kapara ..	..	..	137,739	81,963
	Kohi ..	..	72,286	44,934
	Wairoa ..	..	84,516	51,568
	Motoroa ..	..	37,643	20,908
Waverley ..	Waitotara–Momohaki	..	164,679	82,785
	Okutuku ..	..	79,666	54,590
	Whenuakura–Waitotara	..	196,235	129,084
	..	Waverley ..	32,929	9,832
Total of county	..	..	£1,383,409	£850,075
Waitotara County—				
Tokomaru ..	..	..	160,688	114,641
Waitotara ..	..	..	341,799	241,932
Brunswick ..	..	..	301,578	200,385
Westmere ..	..	..	230,743	139,264
Total of county	..	..	£1,034,808	£696,222
Wanganui County—				
Mangawhero ..	Mangawhero ..	..	285,930	190,706
Upper Wangaehu	Upper Wangaehu	..	379,724	293,975
Mataongaonga ..	Mataongaonga ..	..	142,669	101,354
Kaukatea ..	Kaukatea ..	..	75,445	46,426
Purua ..	Purua ..	..	213,030	131,365
Kaitoke ..	Kaitoke ..	..	167,604	112,117
Total of county	..	..	£1,264,402	£875,943
Waimarino County—				
Huikumu ..	..	..	178,371	162,916
Manganui ..	..	..	106,771	102,174
Ruapehu ..	..	..	49,896	47,320
Karioi ..	..	..	41,197	36,629
Parapara ..	..	..	109,976	87,982
Raetihi ..	..	..	8,254	4,574
Ohakune ..	..	..	73,812	68,927
Total of county	..	..	£568,277	£510,522
Rangitikei County—	..	..		
Ohingaiti ..	..	..	592,127	343,545
Otairi ..	..	..	319,806	161,948
Maungahoe ..	..	..	184,956	103,348

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Rangitikei County—*continued.*			£	£
Paraekaretu ..	..	..	295,614	170,529
Wangaehu ..	..	..	210,083	133,825
Maungaraupi ..	..	..	247,328	138,816
Porewa ..	..	..	256,243	137,975
Otakapu ..	..	Lethbridge ..	27,024	11,143
	Outlying ..	..	267,581	184,197
Rangitoto ..	..	Bulls ..	38,948	11,790
	Outlying ..	..	174,929	114,468
Total of county	..	..	£2,614,639	£1,511,584
Kiwitea County—	..	..		
Hautapu ..	..	..	133,031	79,995
Rangiwahia ..	..	..	147,695	84,405
Peep-o'-day ..	..	..	113,070	58,733
Ongo ..	..	..	118,203	72,513
Kiwitea ..	..	..	112,537	73,118
Waituna ..	..	..	116,451	69,913
Cheltenham ..	..	..	116,380	73,039
Kimbolton ..	..	..	105,995	56,436
Pakihikura ..	..	..	137,488	83,480
Total of county	..	..	£1,100,850	£651,632
Pohangina County—	..	..		
Mangapikopiko	..	..	90,369	49,750
Umutoi ..	..	..	91,220	57,856
Coal Creek ..	..	..	87,492	45,729
Tamaki ..	..	..	67,264	46,878
Pohangina ..	..	..	51,950	28,419
Mangaone ..	..	..	100,498	59,154
Awahou ..	..	..	82,510	45,998
Total of county	..	..	£571,303	£333,784
Manawatu County—				
Sandon ..	..	..	159,436	104,684
Mount Stewart ..	..	..	152,305	105,819
Waitohi ..	..	..	157,280	106,100
Campbell ..	..	..	198,173	137,064
Carnarvon ..	..	..	194,196	152,144
Kawakawa ..	..	..	174,891	120,810
Awahou ..	..	..	165,246	126,839
Total of county	..	..	£1,201,527	£853,460

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Oroua County—			£	£
Waituna ..	Manchester, Wards 1, 2, 3, 4	Halcombe ..	21,443	5,428
		..	580,492	390,503
Ashhurst ..	Manchester, Wards 5, 6, 7	..	580,457	375,032
Total of county	..	..	£1,182,392	£770,963
Kairanga County—				
Taonui ..	..	..	801,596	565,377
Fitzherbert ..	..	..	369,778	233,623
Total of county	..	..	£1,171,374	£799,000
Horowhenua County—				
Tokomaru ..	Wirokino, Wards 1, 2, 3	..	313,478	170,949
Wirokino ..	Wirokino, Wards 4, 5, 6	..	596,431	390,336
Otaki ..	Otaki	..	290,741	164,081
Te Horo ..	Te Horo ..	..	232,694	138,498
Total of county	..	..	£1,433,344	£863,864
Islands—				
Kapiti ..				
Mana ..	..	..	17,984	13,378
Somes ..				
Chatham ..	..	..	90,557	55,836
Total of islands	..	..	£113,541	£69,216
Pahiatua County—				
Mangahao ..	..	..	411,710	240,775
Pukemiku ..	..	..	134,991	77,230
Makuri ..	..	..	210,770	111,428
Mangaone ..	..	..	190,265	111,569
Puketoi ..	..	..	258,070	124,976
Total of county	..	..	£1,205,806	£665,978
Akitio County—				
Akitio ..	..	..	151,128	91,429
Waihi ..	..	..	81,066	47,532
Rakaunui ..	..	..	40,531	25,257
Porgaroa ..	..	..	117,191	69,416
Mataikona ..	..	..	108,542	70,981
Total of county	..	..	£498,458	£304,615

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Castlepoint County—				
East	..	..	170,209	99,222
West	..	..	213,920	117,334
Total of county			£384,129	£216,556
Eketahuna County—				
West	..	..	286,626	161,538
East	..	..	260,484	133,952
Total of county	..	..	£547,110	£295,490
Mauriceville County—				
West	..	..	159,044	77,281
East	..	..	159,233	75,478
Total of county	..	..	£318,277	£152,759
Masterton County—	..	..		
Alfredton ..	..	..	259,508	114,690
Upper Taueru ..	..	..	166,760	90,943
Rangitumau ..	..	..	284,703	170,859
Opaki ..	..	..	372,875	215,656
Te Whiti ..	..	..	168,750	114,392
Wainuioru ..	..	..	536,533	343,480
Total of county	..	..	£1,789,129	£1,050,020
Wairarapa South County—				
Belvedere ..	..	..	198,074	114,737
Dalefield ..	..	..	181,312	110,809
Parkvale ..	..	..	195,246	122,453
Maungaraki ..	..	..	542,274	337,110
Total of county	..	..	£1,116,906	£685,109
Featherston County—				
Pahaoa ..	..	..	Details not yet available as	
Greytown ..	..	..		
Martinborough ..	..	..		
Western Lake ..	..	..		
Kahutara ..	..	..		
Featherston ..	Outlying ..	Featherston ..		
Otaraia ..	..	..		
Turanganui ..	..	..		
Awhea ..	..	..		
Total of county	..	..	£1,893,261*	£1,248,600*

*Approximate.

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Hutt County—				
Whareroa ..	..	..	174,940	86,992
Horokiwi ..	Plimmerton ..	..	19,541	7,631
	Outlying ..	..	180,816	78,074
Porirua ..	..	Johnsonville ..	68,022	31,211
	Outlying ..	..	408,166	146,057
Mungaroa ..	..	..	230,939	135,242
Epuni ..	..	..	181,275	125,467
Wainuiomata ..	..	..	180,126	126,427
Makara ..	Makara ..	..	87,185	44,655
	Seatoun ..	..	144,517	102,620
Total of county	..	..	£1,675,527	£884,376
Collingwood County—				
Aorere ..	Collingwood ..	..	150,273	86,200
	Outlying ..	..	9,864	9,864
Takaka ..	..	..	205,896	100,169
Total of county	..	..	£366,033	£196,233
Waimea County—				
Moutere ..	Upper Moutere ..	..	48,085	22,899
	Outlying ..	..	43,797	26,026
Motueka ..	Riwaka ..	..	92,102	59,329
	Outlying ..	..	112,900	61,362
Stoke ..	Stoke ..	..	235,643	154,985
Wai-iti ..	Dovedale ..	..	36,673	21,892
	Waimea West ..	..	78,586	52,821
	Outlying ..	..	297,399	157,975
Wangapeka ..	..	..	101,163	62,560
Motupiko ..	..	..	141,474	77,797
Wangamoa ..	Suburban North ..	..	105,546	56,421
	Outlying ..	..	6,146	5,577
	Maitai portion ..	..	12,501	10,224
Total of county	..	..	£1,310,015	£769,868
Sounds County—				
Pelorus Sound portion (Croixelles to Cape Lambert)			256,738	145,985
Queen Charlotte Sound and Port Underwood portion			102,352	67,835
Total of county	..	..	£359,090	£213,820

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Marlborough County	— ..	..	243,884	136,939
Pelorus ..	Pelorus ..	..	24,040	7,070
Havelock ..	..	Havelock ..	219,556	134,012
Picton ..	Picton ..	..	206,353	159,069
Spring Creek ..	Spring Creek ..	..	355,784	264,130
Omaka ..	Omaka ..	..	471,544	353,564
Wairau ..	Wairau ..	..	567,777	439,010
Awatere ..	Awatere ..	..		
Total of county	..	..	£2,088,938	£1,493,794
Kaikoura County—	..	..		
Clarence ..	..	..	90,882	82,585
Suburban ..	..	..	97,590	68,383
Peninsula ..	..	..	47,125	20,410
Conway ..	..	..	162,650	132,939
Hundalee ..	..	..	50,609	42,084
Total of county	..	..	£448,856	£346,401
Buller County—				
Karamea ..	..	..	267,975	241,235
Wareatea North ..	..	..	258,075	113,336
Wareatea South ..	..	..	93,307	67,370
Lyell	..	..	28,149	17,347
Charleston ..	..	..	64,253	51,983
Total of county	..	..	£711,759	£491,271
Inangahua County—				
Hampden ..	..	..	397,776	355,934
Boatman's ..	..	..	99,543	71,755
Reefton ..	..	..	196,034	57,803
Murray ..	..	..	15,543	10,272
Crushington ..	..	..	54,310	48,779
Antonio's ..	..	..	101,151	79,286
Total of county	..	..	£864,357	£623,829
Grey County—				
Cobden ..	..	..	96,152	69,580
Brunnerton ..	..	..	139,602	104,461
Waipuna ..	..	..	165,094	109,817
Nelson Creek ..	..	..	67,400	46,507
Red Jack's ..	..	..	117,364	89,489
Maori Creek ..	..	..	51,176	26,549
Paroa.. ..	..	..	35,726	20,767
Marsden ..	..	..	20,358	17,655
Hohonu ..	..	..	133,344	97,056
Total of county	..	..	£826,216	£581,881

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Westland County—				
Arahura ..	..	..	80,890	46,726
Kanieri ..	..	..	220,166	116,370
Southern ..	..	..	524,880	510,130
Total of county	..	..	£825,936	£673,226
Cheviot County—				
Hawkeswood ..	..	..	166,871	139,490
Kaiwara ..	..	..	88,500	83,150
Waiau ..	..	..	114,280	90,620
Lowry ..	..	..	126,153	92,166
Hurunui ..	..	..	98,229	79,825
Seaward ..	..	..	112,183	76,089
Total of county	..	..	£706,216	£561,290
Amuri County—				
Hanmer ..	..	..	205,791	144,937
Pahau ..	..	..	227,732	164,502
Waiau ..	..	..	350,936	279,127
Rotherham ..	..	..	116,963	88,852
Total of county	..	..	£901,422	£677,418
Ashley County—				
Waipara ..	Waipara ..	..	1,350,253	1,144,727
Mount Thomas ..	Ashley ..	..	326,189	248,851
Kowai ..	Kowai ..	..	524,558	377,603
	..	Amberley ..	31,148	10,426
Oxford ..	Oxford ..	..	408,998	297,675
Cust ..	Cust	..	175,102	130,413
Mandeville ..	Mandeville-Rangiora	..	636,684	497,014
West Eyreton ..	West Eyreton ..	..	195,014	161,524
Eyreton ..	Eyreton ..	..	448,662	344,129
Total of county	..	..	£4,096,608	£3,212,362
Selwyn County—				
Avon ..	Avon	..	608,396	385,414
Riccarton ..	Riccarton ..	..	1,137,247	707,130
	Templeton ..	..	520,421	315,304
Courtenay ..	Courtenay ..	..	864,185	632,071
Malvern ..	Malvern ..	..	141,970	104,062
	East Malvern ..	..	150,410	115,297
	South Malvern ..	..	97,004	65,597
	Upper Waimakariri	..	65,444	52,404
Heathcote ..	Heathcote ..	..	530,025	307,780
Halswell ..	Taitapu ..	..	123,641	96,250
	Spreydon ..	..	175,886	95,729

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Selwyn County—*ctd.*				
Halswell—*ctd.*	Halswell ..	..	395,092	277,457
Coleridge ..	Lake Coleridge ..	..	228,432	179,175
	Rakaia ..	..	352,268	259,913
Lincoln ..	Springs ..	..	630,412	470,067
	Lincoln ..	..	375,108	281,619
Ellesmere ..	Ellesmere ..	..	1,342,066	1,066,574
	..	Southbridge ..	36,742	12,991
Total of county	..	..	£7,756,749	£5,424,834
Mount Herbert County—				
Port Victoria ..	..	..	81,201	52,026
Port Levy ..	..	..	130,381	98,372
Total of county	..	..	£211,582	£150,398
Akaroa County—				
Port Levy ..	Pigeon Bay ..	..	150,473	108,930
Little River ..	Little River ..	..	444,123	344,647
Okain's Bay ..	Okain's Bay ..	..	135,472	98,859
Le Bon's Bay ..	Le Bon's Bay ..	..	103,774	75,802
Wainui ..	Town of Akaroa and Wainui	..	452,309	312,878
Total of county	..	..	£1,286,151	£941,116
Ashburton County—				
Mount Hutt ..	Mount Hutt ..	..	935,999	756,767
South Rakaia ..	South Rakaia ..	..	777,153	604,340
Mount Somers ..	Mount Somers ..	..	260,978	211,558
	Anama ..	..	268,462	223,005
Upper Ashburton	Upper Ashburton	..	751,455	574,229
Wakanui ..	Wakanui ..	..	477,005	353,581
	..	Hampstead ..	66,588	30,630
Rangitata ..	Rangitata ..	..	226,609	175,548
	Longbeach ..	..	581,771	464,530
Ashburton ..	Coldstream ..	..	228,680	166,168
	..	Tinwald ..	56,397	30,715
Total of county	..	..	£4,631,097	£3,591,071
Geraldine County—				
Mount Peel ..	Mount Peel ..	..	411,887	331,168
	Geraldine ..	..	613,644	478,293
Raukapuka ..	..	Geraldine ..	59,411	14,671
Temuka ..	Temuka ..	..	765,317	601,763
Total of county	..	..	£1,850,259	£1,425,895

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Levels County—				
Tengawai ..	..	..	288,372	233,238
Point ..	..	..	202,372	160,895
Waimataiti ..	..	..	216,586	163,045
Seadown ..	..	..	213,352	176,649
Claremont ..	..	..	165,677	132,252
Gleniti ..	..	..	158,998	89,384
Otipua ..	..	..	217,851	174,852
Total of county	..	..	£1,463,208	£1,130,315
Mackenzie County—				
Te Kapo ..	..	..	238,339	216,548
Fairlie ..	..	..	245,877	167,078
Albury ..	..	..	311,857	257,985
Total of county	..	..	£796,073	£641,521
Waimate County—				
Upper Pareora ..	..	..	297,825	259,266
Lower Pareora ..	..	..	248,749	209,164
Hakataramea ..	..	..	236,256	193,953
Otaio	..	..	374,016	318,422
Makikihi ..	..	..	294,046	235,763
Deep Creek ..	..	..	457,533	367,196
North Waihao ..	..	..	996,192	829,196
Total of county	..	..	£2,904,617	£2,412,960
Waitaki County—				
Ahuriri ..	..	..	119,899	110,105
Otakaika ..	..	..	263,470	186,769
Awamoko ..	..	..	406,519	356,935
Papakaio ..	..	..	528,623	400,387
Waiareka ..	..	..	551,443	435,922
Incholme ..	..	..	194,785	168,375
Kakanui ..	..	..	313,855	257,905
Otepopo ..	..	..	227,708	156,229
Moeraki ..	..	..	152,230	116,034
Total of county	..	..	£2,758,532	£2,188,661
Maniototo County—				
St. Bathan's ..	..	..	75,659	41,354
Idaburn ..	..	..	63,176	42,848
Mount Ida ..	..	..	173,883	104,367
Kyeburn ..	..	..	64,564	43,235

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Maniototo County—*continued.*			£	£
Puketoi ..	..	..	96,944	66,041
Hyde	..	..	38,369	28,576
Serpentine ..	..	..	56,334	49,721
Total of county	..	..	£568,929	£371,142
Waihemo County—				
Green Valley ..	..	..	44,712	29,803
Dunback ..	..	..	56,104	35,597
Macrae's ..	..	..	90,236	59,994
Blue Mountain ..	..	..	73,997	48,783
Meadowbank ..	..	..	28,768	23,182
Bushy ..	..	..	68,998	44,726
Goodwood ..	..	..	54,934	34,118
Total of county	..	..	£417,749	£276,203
Waikouaiti County—				
Hawkesbury ..	..	..	194,178	139,149
Merton ..	..	..	252,660	116,773
Blueskin ..	..	..	163,486	80,107
North-east Valley	..	..	77,260	43,230
Total of county	..	..	£687,584	£379,259
Peninsula County—				
Portobello Bay ..	Otago Heads ..	..	53,705	23,731
	Portobello (Portobello Ward)	..	56,344	34,579
Broad Bay ..	Portobello (Broad Bay Ward)	..	45,456	26,280
North East Harbour	Portobello (North-east Harbour Ward)	..	51,574	27,453
Sandymount ..	Peninsula (Sandymount Ward)	..	47,743	30,957
Highcliff ..	Peninsula (Highcliff Ward)	..	60,669	34,796
Anderson's Bay ..	Peninsula (Anderson's Bay Ward)	..	92,120	44,355
Tomahaw ..	Tomahawk ..	..	27,622	17,544
Total of county	..	..	£435,233	£239,695
Taieri County—				
Strath-Taieri ..	..	..	170,705	122,793
Deep Stream ..	..	..	152,842	126,748
Maungatua ..	..	..	188,736	144,211
Outram ..		Outram ..	44,645	22,016

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Taieri County—*continued.*			£	£
Outram—*contd.*	Outlying ..	..	212,288	180,632
East Taieri ..	..	..	169,899	124,537
North Taieri ..	Half-way Bush ..	..	20,756	9,749
	Outlying ..	..	145,090	92,558
Kaikorai ..	..	..	203,394	106,481
Otokia ..	..	Grey ..	10,156	3,540
	Outlying ..	..	154,297	107,521
Total of county	..	..	£1,472,608	£1,040,786
Tuapeka County—				
Teviot ..	..	..	140,350	93,251
James ..	..	..	247,792	175,897
Beaumont ..	..	..	46,453	34,342
Gabriel's ..	..	..	40,348	21,239
Waipori ..	..	..	43,579	33,173
Tapanui ..	..	..	190,671	131,613
Brown's ..	..	..	92,018	55,742
Clark's ..	..	..	55,621	33,452
Waitahuna ..	..	..	60,734	32,622
Total of county	..	..	£917,566	£611,331
Bruce County—	..	..		
Clarendon ..	..	..	59,535	40,663
Mount Stuart ..	Mount Stuart ..	..	102,143	72,493
Waihola ..	..	..	75,060	40,388
Balmoral ..	Balmoral ..	..	232,835	155,632
Tokomairiro ..	..	..	217,612	145,918
Glenledi ..	..	..	36,442	26,826
Crichton ..	..	..	74,222	56,383
Kaitangata ..	..	..	62,623	43,249
Matau ..	Inch-Clutha ..	..	67,235	43,433
	Outlying ..	..	69,921	42,635
Total of county	..	..	£997,628	£667,620
Clutha County—				
Glenkenich ..	..	..	156,445	105,060
Waipahi ..	..	..	140,221	92,770
Clydevale ..	..	..	104,703	78,633
Pomahaka ..	..	..	178,078	132,462
Clinton ..	..	Clinton ..	20,344	6,356
	Outlying ..	..	63,726	49,074
Clutha ..	..	..	139,845	100,899

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
Clutha County—*continued.*			£	£
Richardson ..	..	..	155,207	99,880
South Molyneux ..	..	..	128,942	78,449
Catlin's ..	..	..	187,337	99,530
Total of county	..	..	£1,274,848	£843,113
Vincent County—				
Hawea ..	..	..	87,196	64,664
Clutha ..	..	..	44,820	24,006
Lindis ..	..	..	22,279	15,540
Matakanui ..	..	..	58,893	37,164
Manuherikia ..	..	..	71,221	46,494
Dunstan ..	..	..	99,178	58,050
Carrick ..	..	..	35,434	24,243
Earnscleugh ..	..	..	41,359	23,546
Total of county	..	..	£460,380	£293,707
Lake County—				
Matukituki ..	..	..	23,827	19,245
Shotover ..	..	..	20,644	17,066
Greenstone ..	..	..	48,270	38,487
Cardrona ..	..	..	43,302	27,205
Queenstown ..	..	..	54,981	36,213
Arrow ..	..	..	89,430	62,238
Kingston ..	..	..	58,607	48,835
Total of county	..	..	£339,061	£249,289
Fiord County ..	..	..	£131,391	£124,986
Wallace County—				
Mararoa ..	..	..	331,378	259,836
Waiau ..	..	..	292,872	222,755
Wairio ..	..	..	400,078	258,834
Otautau ..	..	Otautau ..	30,759	9,140
	Outlying ..	..	373,922	264,545
Orepuki ..	..	..	188,052	101,887
Aparima ..	..	..	309,457	206,040
Total of county	..	..	£1,926,518	£1,323,037
Southland County—				
Oreti	..	..	431,974	315,844
Wakaia ..	..	..	308,653	228,727
Winton ..	..	..	964,228	614,177
Hokonui (Waimumu portion)	..	..	234,710	189,754

TABLE showing the CAPITAL VALUE of LAND, &c.—*continued.*

County and Riding.	Road District.	Town District.	Capital Value, Land and Improvements.	Unimproved Value of Land (included in previous column).
			£	£
Southland County—*continued.*				
Hokonui (northern portion and Mabel subdivision)	..	..	401,804	281,286
Mataura ..	Knapdale ..	..	349,451	254,872
	Tuturau ..	..	188,486	133,374
	Outlying ..	..	148,195	102,720
Wallacetown ..	..	..	335,046	228,566
Awarua ..	Invercargill ..	..	164,494	85,819
	Outlying ..	..	334,758	199,237
Waihopai ..	Oteramika ..	..	410,365	302,167
Toetoes ..	..	Wyndham ..	35,278	11,663
	Outlying—Wyndham portion	..	90,506	63,739
	Other outlying ..	..	470,598	333,325
Total of county	..	..	£4,868,546	£3,345,270
Stewart Island County—				
North ..	..	..	62,327	42,175
South ..	..	..	97,715	91,705
Total of county	..	..	£160,042	£133,880
Islands—				
Antipodes, Auckland, Campbell	..	..	£13,880	£13,880

NOTE.—No valuations were made for the Cook or Kermadec Islands.

Y.B. Looking up Milford Sound.

PART III.—ARTICLES ON SPECIAL SUBJECTS.

SECTION I.

THE LAND SYSTEM OF NEW ZEALAND.

[By S. Percy Smith, F.R.G.S.]

The Crown lands of New Zealand are administered under "The Land Act, 1892," together with its amendments and the regulations made thereunder.

The distinguishing features of the present land system are the outcome of ideas which have been gradually coming to maturity for some years past in this colony. These features involve the principle of State ownership of the soil, with a perpetual tenancy in the occupier. This, whatever may be the difference in detail, is the prevailing characteristic of the several systems under which land may now be selected. In New Zealand this tendency to State ownership has taken a more pronounced form than in any of the Australian States. In point of fact, most of the Crown lands are now disposed of for 999 years. The rentals are based on the assessed value of the land at the time of disposal, without increase or recurring valuations. Under this system there is a fixity of tenure practically equal to freehold, and which, like freehold, necessarily carries with it the power of sale, sub-lease, mortgage, or disposition by will. At the same time the improvements made in the soil by cultivation, &c., are secured to the tenant should he from any cause be obliged to forfeit or surrender his lease.

The advantages of this system to the selector are manifest. When it is taken into consideration that, with few exceptions, the Crown lands are, in their prairie condition, incapable of profitable use, the advantage to the settler of setting free his capital to develop the capabilities of the soil, rather than having to expend it in the purchase of a freehold, is very apparent. One of the most striking benefits of this system is the advantage it gives to the man who, with little more capital than his strong right arm, is enabled to make a home for himself; which, under the freehold system, he would be unable to accomplish.

The values placed on the Crown lands are, as a rule, low, for the State does not so much seek to raise a revenue directly therefrom as to encourage the occupation of the lands by the people; this occupation secures an indirect increased revenue, besides the other advantages resulting from a numerous rural population.

Again, underlying the whole of the New Zealand land system is a further application of the principle of "the land for the people"—viz., the restriction in area which any man may hold. This subject has been forced upon the attention of the Legislature by defects in former systems, under which one individual with means at his command could appropriate large areas, to the exclusion of his less wealthy fellow-settler. Under existing conditions, where the price at which land is offered is fixed for ever, and where choice of selection is by ballot, every would-be settler has the same chance, and may hold under the Crown an equal area of land. The quantity that a selector may hold is so fixed as to encourage the class of moderate farmers, for up to the statutory limit the amount he may select is left almost entirely to himself. The Act defines the amount of land any one may hold at 640 acres of first-class or 2,000 acres of second-class land. These limits apply to lands which are thrown open for optional selection, but in some cases, where the quality of the land is very good and the selectors many, the limit is by regulation made smaller.

In addition to the many advantages offered by the lease-in-perpetuity system, the Land Act provides others, to meet the wants of different classes. The general rule is that land thrown open for optional selection is offered to the public under three different tenures, the choice of which is left to the would-be settler.

The three tenures are:—

(1.) Cash, in which one-fifth of the purchase-money is paid down at once, and the remainder within thirty days. The final title is not given until certain improvements have been made on the land.

(2.) Lease with a purchasing clause, at a 5-per-cent. rental on the value of the land; the lease being for twenty-five years, with the right to purchase at the original upset price at any time after the first ten years and within twenty-five years, or to convert into a lease in perpetuity (3rd tenure).

(3.) Lease in perpetuity, at a rental of 4 per cent. on the capital value.

The present land-laws have been in force since the 1st November, 1892, and, therefore, the returns of the Department of Lands and Survey for the year ending the 31st March, 1903, in respect of lands the tenure of which is optional, will give a fair idea of that tenure most favoured by the public. The figures are:—

1. Cash: 134 selections, 16,747 acres.
2. Occupation with right of purchase: 403 selections, 118,557 acres.
3. Lease in perpetuity: 285 selections, 108,065 acres.

"The Land Act, 1892," provides for a special class of settlement called small-farm associations, which found favour with the public to a very considerable extent during the first three years after

the Act of 1892 came into force, but is now superseded to a large extent by the improved-farm settlement system. The small-farm association system provides that, where not less than twelve individuals have associated themselves together for mutual help, such an association can, with the approval of the Minister of Lands, select a block of land of not more than 11,000 acres, but there must be a selector to each 200 acres in the block. The extreme limit that one person may hold is fixed at 320 acres. Settlements of this class are held on lease in perpetuity, in a similar way to lands under the same tenure when thrown open for optional selection. The conditions of residence and improvement are the same. The system offers many advantages to the settler, so long as the blocks of land are judiciously chosen, having regard to quality of land, access, markets, and the probability of employment being obtained in the neighbourhood. In the eagerness to obtain lands on such easy terms these points have, in the past, not received sufficient attention by some of the associations, and in consequence they are not all successful.

Under "The Land Act, 1885," there was a somewhat similar system, but it allowed of the acquisition of the freehold. This is now being taken advantage of to a considerable extent.

The following figures show the amount of settlement by associations under both Acts on the 31st March, 1903. At that date there were 678 selectors, holding 123,131 acres under various tenures and in different parts of the country. Many of the settlements, which were carefully selected, are doing well. Others, where long and expensive roads have to be made to them, are as yet not very productive, and many selections have been abandoned.

The village-settlement system of New Zealand has excited much inquiry. This system provides: 1st, villages of one acre sections; 2nd, small farms of 100 acres. There has not been any great extension of this system in recent years. On the 31st March last there were 1,781 settlers holding 36,963 acres, and the total number of persons residing in these settlements was 1,204 and 577 non-resident, the amount advanced by Government for houses, clearing, &c., being £15,115, of which £3,916 had been returned. The total value of improvements on the lands at the same date was £168,041. The above figures include the settlement on reserves and endowments.

The improved-farm settlement system was first begun in order to find work for the people. Considerable areas of forest-clad Crown lands were set aside, and small contracts for the clearing, burning, and sowing these with grass have been let. In most cases the farms are selected or balloted for in their primitive state, and the settler is for a time paid for the improvements he makes, or, in other words, the cost of converting forest lands into grass lands is advanced from time to time by the Government. In other cases a piece of forest land is taken in hand, and men are employed at fixed rates in felling, burning, and grassing. When so much grass is laid

down as will give a good start, the land is opened for selection in sections of 50 to 200 acres and balloted for among the applicants. The farms are let on lease in perpetuity at a rental sufficient to cover the cost of clearing, &c., together with a fair rental of the land. Up to the 31st March, 1903, 47 settlements had been allocated, covering an area of 65,859 acres, situate in various parts of the colony. At that date 452 settlers had been allotted sections, who, together with their families, numbered 1,731 persons who were residing on the lands. They had felled and grassed 26,542 acres. The amount paid to the settlers up to the 31st March, 1903, was £53,727, and the total value of improvements on the land (including the Government advances) was £94,515.

The size of holdings averages about 100 acres.

The Land for Settlements Acts.

In the earlier years of the settlement of New Zealand there were opportunities for men of capital and judgment to acquire large estates, and while there were plenty of good Crown lands to select from this was of great advantage to the colony when money was needed for administration and roads and bridges. These large estates employed hired labour, and most of them did little towards cultivating their lands, and consequently progress beyond the pastoral stage ceased in the districts in which they were situated. As the best lands in the course of years passed from the Crown, the country became a series of agricultural communities interspersed with large properties occupied by a manager and a few shepherds, and the people pressed that they and their sons should be allowed to occupy these large estates instead of being compelled to go into inaccessible back country without roads or railways. To meet this the Hon. (later Sir) John McKenzie, then Minister of Lands, introduced into the Legislature in the session of 1892 a Bill intituled "The Land for Settlements Act," which authorised the purchase from private individuals of suitable properties for subdivision into farms. Under the provisions of this Act and the amending Acts, which are now consolidated into the Act of 1900, properties have been acquired, and divided into small farms and leased in perpetuity at a 5-per-cent. rental, on a capital value fixed at a rate sufficient to cover first cost, together with survey, administration, and roads (if required). The usual process of acquisition is as follows: Whenever a property is offered to the Government, if it is so situated as to meet the object of the Act, a report on it is obtained from a Government officer, and, should his report be favourable, the question of purchase is then considered by a Board of Land Purchase Commissioners, composed of the Inspector, who is the permanent Chairman, three other Government officers, whose training and duties qualify them to advise the Government as to whether the purchase is a suitable one, and as to the price which should be given for the property, and a member, nominated by the Government from residents in the district where the land to be dealt with is situated. It is only on the

advice of this Board that the Government acts. In nearly all cases the properties acquired have been improved to a certain extent by fencing and buildings, and were situated in the neighbourhood of closely settled districts. The amount which may be expended per annum under the Act is £500,000. The Act also provides for the exchange of high-lying pastoral Crown lands for low-lying agricultural lands suitable for small holdings.

Lands may also be taken compulsorily in cases where the Board cannot agree with the owner as to price, &c., and where the Governor in Council decides to acquire the land for closer settlement. The amount payable to the owner is decided by a Compensation Court, composed of a Judge of the Supreme Court and two Assessors, one appointed by Government, the other by the owner of the property. Four properties have hitherto been acquired compulsorily, and they have been disposed of on satisfactory terms.

The acquisition of lands under the Land for Settlements Acts has proved beneficial in providing homes for a large class of men of moderate capital who shrink from the rough work of breaking in new country or who, having accumulated capital (cash, stock, and implements), prefer open country near civilisation. Sons of farmers begin life near the old home, and help from there is given in many ways. The system also affords to the small-farmer class of the Old Country an opening for building up homes for themselves where their previous experience will be of use, instead of having to learn the methods adapted to a new and wild country.

Preference is given to landless people, and applicants for rural land have to satisfy the Land Board as to their means to stock and cultivate the property applied for and erect suitable buildings thereon. The Board, in fact, has a discretion as to who may become tenants.

Land may also be compulsorily taken for workmen's homes within a borough having a population of at least 15,000 persons, or within a radius of fifteen miles from the border thereof, for the purposes of providing workmen's homes or villages; but the area is restricted to not more than 100 acres every year within any such borough, or within the radius named above from the boundary of the borough.

The owner is left with right to retain an area of not more than 10 acres if in a borough, or 50 acres in any other case.

A workmen's allotment is not to exceed 5 acres, and advances up to £50 are made by Government to successful applicants in aid of the cost of fencing and building dwellinghouses.

Regulations giving full directions to applicants under this Act have been issued from time to time, which should be in the hands of every one before applying for lands under this Act.

An account of the operations under the Land for Settlements Acts will be found in Part II. of this work.

Purchase of Native Lands by Government.

From about the year 1823 (which is the date of the first recorded deed) until the 6th February, 1840, the date of the Treaty of Waitangi, lands in New Zealand were acquired by direct purchase from the Maoris by individual members of the white races. During the years 1837 to 1839, or about the time it became probable that the sovereignty of the islands would be assumed by the United Kingdom, the greater number of these purchases were made, and they extended to most parts of the country. These purchases are technically known as "the old land claims," and their total number (including pre-emptive claims), as estimated by Commissioner F. Dillon Bell in 1862, was 1,376, covering an area of about 10,322,453 acres, out of which large area grants were recommended for 292,475 acres. These figures have been slightly added to since, but not to any very large extent. The large area shown above was reduced on survey to about 474,000 acres, situated principally to the north of Auckland. The difference in area between the amount granted and the total area surveyed became what are termed "surplus lands of the Crown." It was held that the Native title had been fully extinguished over the whole area surveyed; but, as by statute the claimants could only be granted 2,560 acres each, the balance became vested in the Crown on the assumption of the sovereignty, the Native title having been fully extinguished.

In many cases the titles did not issue to those to whom the land was awarded, as they were compensated by scrip issued by the Government, with the understanding that such scrip was to be exercised in the purchase of Crown lands in the neighbourhood of Auckland, to which place it was desirable—so soon as the capital was founded—to draw a population. The lands thus paid for in scrip became Crown lands, and these, together with the surplus lands, have from time to time been disposed of by the Crown and settled on. The amount of scrip, &c., issued up to 1862 was over £109,000.

On the signing of the Treaty of Waitangi on the 6th February, 1840, the pre-emptive right was ceded to the Government, and consequently private purchase ceased. This remained the law until the passing of "The Native Land Act, 1862," when the Crown relinquished its right of pre-emption, whilst at the same time the purchase of Native lands for the Crown did not abate, but continued side by side with the private purchases up to the passing of "The Native Land Court Act, 1894."

"The Maori Lands Administration Act, 1900," is a measure intended to restrain Natives from pauperising themselves in the future by parting with the freehold of the balance of their lands (about five millions of acres). Its main provisions are—

(1.) Prohibition of further alienation of the freehold of Native lands, either to the Crown or private purchasers, except as to inchoate transactions at the date of the passing of the Act and certain limited areas which were then comprised in separate titles or held by not more than two owners.

(2.) Leasing of Native lands through partly elected and partly nominated Councils possessing all the powers and, where authorised, exercising all or any of the functions of the Native Land Court.

(3.) Advances to Natives to road and otherwise improve their surplus lands for their own use and occupation.

From time to time since 1840 various sums were appropriated by Government or by Parliament for the acquisition of a Crown estate. Up to the date of passing of "The Native Land Act, 1862," these operations were conducted by officers of the Government specially appointed, who, from a knowledge of the Maoris, their customs and disposition, were successful in securing large areas of land for settlement. It must be conceded that their operations as a whole were successful, and that the number of disputed cases arising out of their labours was exceedingly small. The Waitara purchase is, however, here excluded, for there were reasons of general policy affecting that sale which did not prevail in other cases. This purchase was the ostensible cause of the war of 1860 and following years, but the motives which led to it were far deeper than the mere purchase of a few acres—there was a great principle at stake.

The difference effected in the mode of purchase by "The Native Land Act, 1862," was this: Previously, the title of the Maoris who were to receive payment for the land was decided by the Land Purchase officers; but the Act quoted set up a Court, presided over by able Judges, who determined the titles, which were afterwards registered in a special Court. Purchases have since been effected with the registered owners.

It is difficult to obtain figures showing the actual area acquired by the Crown from the Maoris up to 1870, but in round numbers it was 6,000,000 acres in the North Island; whilst the whole of the Middle Island, with the exception of reserves for the original Native owners, was acquired prior to the passing of "The Native Land Act, 1862." Stewart Island was purchased from the Native owners by deed dated 29th June, 1864.

The Native rebellion of 1860-69 brought Native-land purchases, for the time being, practically to a standstill.

The Immigration and Public Works Acts of 1870 and 1873 appropriated £200,000 and £500,000 respectively for the purchase of lands in the North Island; and these amounts have, up to the 31st of March, 1903, been augmented by further annual appropriations from the public funds and other loan-moneys, covering altogether a total expenditure since 1870 of £2,000,013, with the following results: Area finally acquired in the North Island from Natives, from 1870 to 31st March, 1903, 7,940,027 acres. Area under negotiation in the North Island on 31st March, 1903, 114,530 acres; interests therein finally acquired, 14,385 acres.

Digest of the Land Laws.

Administration.

The Crown lands are administered, under the authority of "The Land Act, 1892," by the Hon. the Minister of Lands at Wellington. For convenience the colony is divided into ten land districts, each being under the local direction of a Commissioner and a Land Board. The Commissioner's office is known as the principal land office, and in some of the larger districts there are one or more local land offices. It is with these land offices the selector has to transact all business, from the first consultation of the maps to the final receipt of the Crown title.

Land Districts and Principal Land Offices.

The names of the land districts and of the towns where each principal office is situated are, beginning with the most northerly and taking them geographically, as under:—

Land District.	Town where Principal Land Office is situated.	Land District.	Town where Principal Land Office is situated.
Auckland	Auckland.	Marlborough	Blenheim.
Taranaki	New Plymouth.	Westland	Hokitika.
Hawke's Bay	Napier.	Canterbury	Christchurch.
Wellington	Wellington.	Otago	Dunedin.
Nelson	Nelson.	Southland	Invercargill.

Classification of Lands, &c.

Crown lands are divided into three classes:—

(1.) Town and village lands, the upset prices of which are, respectively, not less than £20 and £3 per acre; such lands are sold by auction:

(2.) Suburban lands, the upset price of which may not be less than £2 an acre; these lands are also sold by auction:

(3.) Rural lands, which may be disposed of at not less than £1 per acre for first-class, and 5s. an acre for second-class lands; such lands may be sold or leased by auction, or sold or leased on application.

No rural section may be larger than 640 acres in extent if first-class land, or 2,000 acres if second-class land, whether offered by auction or application. No person can select more than 640 acres of first-class or 2,000 acres of second-class land, including therein any land which he then holds. Small grazing-runs, first-class, may not exceed 5,000 acres, and second-class 20,000 acres. Pastoral runs are limited to areas which will carry 20,000 sheep or 4,000 cattle. No person can select more than one run.

Mode of acquiring Crown Lands.

Crown lands may be acquired as follows:—

(1.) By auction, after survey, in which case one-fifth of the price is paid down at the time of sale, the balance within thirty days:

(2.) By application, after the lands have been notified as open for selection, in which case the applicant fills up a form (to be obtained at any of the Land Offices) and makes the declaration and undertaking required by the particular system he wishes to select under.

All applications, whether for surveyed or unsurveyed lands, are deemed to be simultaneous if made on the same day, and, if there be more than one applicant for the same land, the right of selection is determined by ballot.

Lands thrown open for application may be either surveyed or unsurveyed, and those not selected the first day remain open.

The Optional System of Selection.

Lands for selection are notified as open for application on and after a stated day, and, *at the option of the applicant,* may be obtained on any of the three following tenures: (*a*) Freehold; (*b*) Occupation with the right of purchase; (*c*) Lease in perpetuity.

(*a.*) *Freehold.*

If the land is surveyed, one-fifth of the price is to be paid down when the application is granted, and the balance within thirty days; or, if the land is not completely surveyed, the survey-fee is deposited when the application is agreed to, and goes towards the purchase of the land; the balance must be paid within thirty days of notice that the survey is completed.

A certificate of occupation will issue to the purchaser on final payment, which will be exchanged for a Crown title so soon as the Board is satisfied that the improvements mentioned on the next page have been completed.

(*b.*) *Occupation with Right of Purchase.*

Lands selected on this tenure are held under a license for twenty-five years. At any time subsequent to the first ten years, and before the expiration of the license, after having resided and made the improvements hereinafter described, the licensee can, on payment of the upset price of the land, acquire the freehold. If the land be not purchased, the license may be exchanged for a lease in perpetuity.

The rent is 5 per cent. on the cash price of the land; a half-year's rent has to be paid at the time the application is approved, if surveyed land, which represents the half-year's rent due in advance on the 1st day of January or July following the selection. If the land is unsurveyed, the cost of survey is to be paid, and is credited to the selector as so much rent paid in advance, counted from the 1st day of January or July following thirty days' notice of the completion of survey.

Residence and improvement of the land are compulsory, as hereinafter described.

(c.) Leases in Perpetuity.

Lands selected on this tenure are leased for 999 years, subject to the conditions of residence and improvements described below. The rental is 4 per cent. on the cash price of the land, and applications are dealt with in the same way as under the previous tenure (*b*), but there is at no time a right to purchase the freehold.

Two or more persons may make a joint application to hold as tenants in common under either of the two last-named tenures.

Residence and Improvements.

Under the two last-mentioned tenures, the conditions as to residence and improvements are:—

RESIDENCE—

(1.) Must commence on bush or swamp lands within four years, and in open or partly open land within one year, from the date of selection:

(2.) Must be continuous for six years on bush or swamp land, and for seven years on open or partly open land, on lands occupied with a right of purchase:

(3.) Must be continuous for a term of ten years on lease-in-perpetuity lands.

The Board has power to dispense with residence in certain cases, such as where the selector is residing on adjacent lands, or is a youth or unmarried woman living with parents, and in a few other cases.

RESIDENCE implies the erection of a habitable house to be approved of by the Board.

IMPROVEMENTS which must be made are as follows:—

(1.) Freehold-tenure lands must be improved within seven years to an amount of £1 an acre for first-class land, and 10s. an acre for second-class land.

(2.) Lands held on lease with right of purchase, or on lease in perpetuity, must be improved to an amount equal to 10 per cent. of the value of the land within one year from the date of the license or lease; within two years must be improved to the amount of another 10 per cent.; within six years must be improved to the value of another 10 per cent., making 30 per cent. in all within the six years. In addition to the above, the land must be further improved to an amount of £1 an acre for first-class land, and on second-class land to an amount equal to the net price of the land, but not more than 10s. an acre.

Improvements may consist of reclamation from swamps, clearing of bush, planting with trees or hedges, cultivation of gardens, fencing, draining, making roads, wells, water-tanks, water-races, sheep-dips, embankments or protective works, or in any way improving the character or fertility of the soil; or the erection of any building, &c.; and *cultivation* includes the clearing of land for cropping, or clearing and ploughing for laying down with artificial grasses, &c.

Special-settlement Associations.

Under the existing regulations any number of persons, not less than twelve, may select and apply for a block of land of not less than 1,000 acres or more than 11,000 acres in extent, but the number of members must be such that there shall be one for every 200 acres in the block, and no one can hold more than 320 acres, except in swamp lands, where the area may be 500 acres.

The capital value of lands within a special settlement is fixed after survey by special valuation, but may not be less than 10s. an acre; the rental is not less than 4 per cent. on the capital value, and the tenure is a lease in perpetuity.

Residence, occupation, and improvements are generally the same as already described, and applications have to be made in manner prescribed by regulations.

Applicants should apply to a Commissioner for a copy of the regulations, as they are liable to change at any time.

Suitable land for small settlement of this kind is now scarce.

Improved-farm Settlements.

Special regulations are in force for this class of settlement, which should be applied for, but briefly the terms are as follow: Applicants are selected by the Commissioner of Crown Lands, preference being given to married men. The areas of the farms may vary from 10 acres to 200 acres, according to locality; no settler can select more than one farm. Contracts are made with the settler to fell the forest, burn it, and sow with grass-seed up to 100 acres, the cost being paid by the Government, and £10 may be advanced to a single man and £30 to a married man to help to build a house. The rates allowed for felling are those current in the district. The land is then leased for 999 years at a rental of 4 per cent. on the unimproved capital value, *plus* the actual cost of the felling and grassing. As a rule, the settlers can get employment on the road-works in the neighbourhood, but Government does not guarantee this.

Residence for the first ten years is compulsory, and improvements must be made in terms of Part III. of "The Land Act, 1892." (See *ante*.)

Village Settlements.

Village settlements are disposed of under regulations made from time to time by the Governor, but the main features are as follow:—

Such settlements may be divided into:—

(1.) Village allotments not exceeding one acre each, which are disposed of either by auction among the applicants or by application, as already described, with option of tenure, the cash price being not less than £3 per allotment:

(2.) Homestead allotments not exceeding 100 acres each, which are leased in perpetuity at a 4-per-cent. rental on a capital value of not less than 10s. per acre.

Residence, improvements, and applications are the same as already described. The leases are exempt from liability to be seized or sold for debt or bankruptcy.

The Colonial Treasurer is empowered in certain cases to advance small sums for the purpose of enabling selectors to profitably occupy their allotments.

Small Grazing-runs.

Small grazing-runs are divided into two classes: First-class, not exceeding 5,000 acres; second-class, not exceeding 20,000 acres in area. The rental in both cases is not less than 2½ per cent. on the capital value per acre, but such capital value cannot be less than 5s. per acre. Small grazing-runs are leased for terms of twenty-one years, with right of renewal for other twenty-one years, at a rent of 2½ per cent. on the then value of the land. The runs are declared open for selection, and applications and declarations on the forms provided have to be filled in and left at the Land Office, together with the deposit of one half-year's rent, which represents that due on the 1st day of March or September following the selection.

No holder of a pastoral run, and no holder of freehold or leasehold land of any kind whatever, over 1,000 acres in area, exclusive of the small grazing-run applied for, may be a selector under this system; and only one small grazing-run can be held by any one person.

The lease entitles the holder to the grazing rights, and to the cultivation of any part of the run, and to the reservation of 150 acres round his homestead through which no road may be taken; but the runs are subject to the mining laws.

Residence is compulsory, if bush or swamp land, within three years; if open, within one year; and must be continuous to the end of the term, but may in a few cases be relaxed. Improvements necessary are as follow: Within the first year, to the amount of one year's rent; within the second year, to another year's rent; and, within six years, to the value of two other years' rent: making in all a sum equal to four years' rental, which must be expended within six years. In addition to these improvements, bush-covered first-class runs must be improved to an amount of 10s. an acre, and second-class bush-clad runs to an amount of 5s. an acre.

These runs may be divided, after three years' compliance with the conditions, amongst the members of the selector's family.

Pastoral Runs.

Pastoral country is let by auction for varying terms not exceeding twenty-one years; and, excepting in extraordinary circumstances, runs must not be of a greater extent than will carry 20,000 sheep or 4,000 head of cattle. Runs are classified from time to time by special Commissioners into: (1) Pastoral lands, which are suitable only for depasturing more than 5,000 sheep; (2) pastoral-

agricultural lands, suitable for subdivision into areas of under 5,000 acres, which may be either let as pastoral runs, generally for short terms, or cut up for settlement in some other form. Leases of pastoral lands may not be resumed; leases of pastoral-agricultural lands may be resumed at any time after twelve months' notice, without compensation.

No one can hold more than one run; but, in case of any one holding a run of a carrying-capacity less than 10,000 sheep, he may take up additional country up to that limit.

Runs are offered at auction from time to time, and half a year's rent has to be paid down at the time of sale, being the amount due in advance on the 1st day of March or September following the sale, and the purchaser has to make the declaration required by the Act. All leases begin on the 1st day of March, and they entitle the holder to the grazing rights, but not to the soil, timber, or minerals; and the lease terminates over any part of the run which may be leased for some other purpose, purchased, or reserved. The tenant has to prevent the burning of timber or bush; in open country to prevent the growth of gorse, broom, or sweetbriar; and to destroy the rabbits on his run. With the consent of the Land Board, the interest in a run may be transferred or mortgaged, but power of sale under a mortgage must be exercised within two years.

In case it is determined again to lease any run on expiry of the lease, the new lease must be offered by auction twelve months before the end of the term, and if, on leasing, it shall be purchased by some one other than the previous lessee, valuation for improvements, to be made by an appraiser, shall be paid by the incoming tenant, but to a value not greater than three times the annual rent—excepting in the case of a rabbit-proof fence, which is to be valued separately. If the run is not again leased, the value of rabbit-proof fencing is paid by the Crown, but the tenant has no claim against the Crown beyond the value of the rabbit-proof fence; he may, however, within three months of sale, remove fences, buildings, &c. Runs may also be divided with the approval of the Board.

Survey Charges on Unsurveyed Lands.

The following is the scale of charges for surveys of unsurveyed lands:—

Not exceeding 30 acres, £6.

Exceeding 30 and up to 50 acres, 3s. 6d. per acre, but not less than £6.

Exceeding 50 and up to 100 acres, 3s. per acre, but not less than £8 15s.

Exceeding 100 and up to 200 acres, 2s. 6d. per acre, but not less than £15.

Exceeding 200 and up to 300 acres, 2s. per acre, but not less than £25.

Exceeding 300 and up to 500 acres, 1s. 8d. per acre, but not less than £30.

Exceeding 500 and up to 1,000 acres, 1s. 4d. per acre, but not less than £41 10s.

Exceeding 1,000 and up to 2,000 acres, 1s. per acre, but not less than £66 10s.

For the survey of any area of rural land, being open land, the scale of charges shall be two-thirds the foregoing rates.

The Chief Surveyor may vary the above charges by substituting a rate per mile or per day for such work as may not come under the foregoing scale.

ADVANCES TO SETTLERS.

THE Government Advances to Settlers Act was a Government policy measure in the legislation of 1894. It was designed to afford relief to a numerous class of colonists who were struggling under the burden of high rates of interest and heavy legal expenses of mortgages. These were established when prices of agricultural produce were high and profits large; and, so long as business continued to be prosperous, they attracted but little, if any, attention. For several years preceding 1894 commerce and agriculture had suffered from world-wide depression; settlers were becoming embarrassed in their circumstances; and the high rates of interest still charged were felt to be a burden on the industry of the people not easily borne, and a hindrance to the settlement and development of the farming lands of the colony. Under these circumstances the Government brought in the Government Advances to Settlers Act. It was passed towards the close of the session of 1894, and immediately came into operation, with results which have proved beneficial to the farming community. A general decline in the rates of interest at once set in, and it is not too much to claim that the Act has been instrumental in lowering these to a considerable extent on several millions of money invested on mortgage of the farming lands of the colony. This result, while it may have diminished the incomes of a few persons resident within the colony, has benefited thousands of deserving settlers and led to large areas of land being brought under cultivation that, but for the Advances to Settlers Act, would still be in their natural state.

The Act authorised the raising of three million pounds sterling within two years, in sums of a million and a half per annum, at a rate of interest not higher than 4 per cent. In May, 1895, tenders were invited in London for £1,500,000 of 3-per-cent. inscribed stock of the Government of New Zealand, and applications were received for £5,960,400 at prices ranging from £100 to £90. The million and a half was placed at an average price of £94 8s. 9d.

An amending Act, passed in 1895, extended the time for raising the residue of the three millions to three years from the coming into operation of the amending Act. In 1898 this term was extended

for a further period of three years, and in 1901 the time-limit restriction was removed altogether, power being given at the same time to raise an additional loan of £1,000,000.

To carry out the objects of the Act, an office was established called the "Government Advances to Settlers Office"; at the same time a General Board was constituted to co-operate with and assist the Superintendent, the title by which the chief administrative officer is known.

The business of the office is the advancing of money in New Zealand on first mortgage of lands and improvements held under any of the following classes of tenure, free from all encumbrances, liens, and interests other than leasehold interests, that is to say:—

(1.) Freehold land held in fee-simple under "The Land Transfer Act, 1885," or freehold land held in fee-simple the title to which is registered under "The Deeds Registration Act, 1868."

(2.) Crown land held on perpetual lease under "The Land Act, 1885."

(3.) Crown land held under Parts III. and IV. of "The Land Act, 1892."

(4.) Crown land held on lease as a small grazing-run under "The Land Act, 1885," or under "The Land Act, 1892."

(5.) Crown land held on agricultural lease under "The Mining Act, 1891."

(6.) Crown land held on lease (not being for mining purposes) under "The Westland and Nelson Coalfields Administration Act, 1877."

(7.) Native land held on lease under "The West Coast Settlement Reserves Act, 1881," or under the Act of 1892.

(8.) Land held on lease under "The Westland and Nelson Native Reserves Act, 1887."

(9.) Land held under "The Thermal-Springs Districts Act, 1881."

(10.) Educational and other reserves which are subject to the provisions of "The Land Act 1877 Amendment Act, 1882," by virtue of Proclamation made under section 50 thereof, or "The Land Act, 1885," by virtue of Proclamation made under section 237 thereof, or "The Land Act, 1892," by virtue of Proclamation made under section 243 thereof, and are held on perpetual lease or lease in perpetuity, or on deferred-payment or small grazing-run systems.

(11.) Crown land held by license on the deferred-payment system under Part III. of "The Land Act, 1885."

(12.) Land held under lease from a leasing authority, as defined by "The Public Bodies' Powers Act, 1887," and providing for the payment by the incoming tenant of valua-

tion for improvements made upon the land, whether by the lessee named in such lease or any former lessee, as tenant.

With regard to classes 10 and 12, a lease is not eligible if it provides for absolute forfeiture (without compensation) for breach of conditions, or if on the determination of the lease compensation is to be allowed for certain improvements only.

Mortgages are granted either on the instalment or the fixed-loan system (fully described hereafter); and the margins of security required by the Act are as follow:—

(1.) On freeholds (other than urban or suburban) three-fifths of the value may be advanced either on the instalment or fixed-loan system: Provided that in the case of first-class agricultural freeholds instalment loans may be advanced up to two-thirds of the value.

(2.) On leaseholds (other than urban or suburban) one-half of the value of the lessee's interest in the lease may be advanced on the instalment system. No loans are granted on leaseholds on the fixed-loan system.

(3.) On urban and suburban freeholds, loans are granted on the instalment system only, and the amounts of loan are limited as follow:—

(*a.*) On urban freehold on which buildings exist, three-fifths of the value of the land, *plus* one-half the value of the buildings, may be advanced;

(*b.*) On suburban freehold on which buildings exist, one-half the value of the land, *plus* one-half the value of the buildings, may be advanced:

(*c.*) On urban or suburban freehold on which no buildings exist, one-half the value of the land may be advanced, but on such security no loan shall be granted except for the erection of buildings on the land: the loan to be advanced by instalments at the discretion of the Board, as the erection of the buildings proceeds.

"Urban land" means land which is situate in a borough having a population of at least two thousand inhabitants and is not used for farming, dairying, or market-gardening purposes.

"Suburban land" means land which is situate in a borough having a population of less than two thousand inhabitants, or in any town, or in the vicinity of any town or borough, and is not used for farming, dairying, or market-gardening purposes.

Lands situated within towns, and are used for farming, dairying, or market-gardening, are treated in accordance with paragraphs (1) and (2) above.

The right of determining what land may be considered "urban" or "suburban," or "first-class agricultural," is imposed by the Act on the General Lending Board.

The security which the applicant offers for the loan must consist of one or more holdings of the several classes of tenure above men-

tioned, and must, of course, be of the necessary value; and, if the security is leasehold, all the covenants and conditions of the lease, including the payment of rent, must have been regularly complied with.

Any person desiring an advance is required to make a written application on the prescribed form, a copy of which can be obtained from any Postmaster in the colony. The Postmaster also supplies an envelope in which the application may be forwarded free of postage, and affords to the applicant any explanation which may be required respecting the filling-in of the application.

In the case of an application for an advance on the security of an interest in land held under a lease or license issued from the Lands Department (and belonging to one or more of the classes of tenure numbered 2, 3, 4, 5, 6, 9, 10, 11), a notice of the application must be forwarded to the Commissioner of Crown Lands for the district in which the land is situated. The requisite form, and an envelope for forwarding it free of postage, may be obtained from any Postmaster in the colony.

No loan of less than £25 or more than £3,000 can be granted, and in the case of "urban" or "suburban" lands the maximum loan is fixed at £2,000.

All applications must be accompanied by a valuation-fee according to the following scale :—

	£	s.	d.
On an application for a loan not exceeding £100	0	10	6
Exceeding £100 but not exceeding £250 ...	1	1	0
Exceeding £250 but not exceeding £500 ...	1	11	6
Exceeding £500 but not exceeding £3,000 ...	2	2	0

If the applicant has already obtained any advance under the Act and is desirous of obtaining a further advance, either on the same security or on a separate security, the amount of the application, added to the amount of the advances already obtained, must not exceed the limit mentioned above—£3,000 for farming and £2,000 for urban or suburban lands.

Mortgages granted on the fixed-loan system may be for any period not exceeding ten years, and the principal is repayable at the end of the term. They may also be repaid in whole or in part on any half-yearly due date during the term, as explained hereafter. Interest at the rate of 5 per cent. is payable half-yearly, reducible to 4½ per cent. provided payment is made not later than fourteen days after due date and no arrears remain outstanding.

Mortgages granted on the instalment system are repayable by seventy-three half-yearly payments of principal and interest combined. They may also be repaid in whole or in part at any time. Interest is charged at the rate of 5 per cent., reducible to 4½ per cent. provided payment is made not later than fourteen days after due date and no arrears remain outstanding.

Every half-yearly instalment, except the last, is at the rate of £3 (less the rebate of interest in case of prompt payment) for every £100

of the loan. The following table shows, taking a loan of £100 as an instance, how much of each instalment is applied to repaying the principal, and how much is in payment of interest. It shows also the amount of rebate in respect of each instalment, and the balance of principal remaining due after payment of the respective instalments until the loan is entirely repaid in thirty-six years and a half:—

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS FOR EVERY ONE HUNDRED POUNDS OF THE LOAN.

Half-year.	Prescribed Half-yearly Instalment.	Apportioned thus:		½ per Cent. Rebate of Interest.	Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1st	3 0 0	2 10 0	0 10 0	0 5 0	99 10 0
2nd	3 0 0	2 9 9	0 10 3	0 5 0	98 19 9
3rd	3 0 0	2 9 6	0 10 6	0 4 11	98 9 3
4th	3 0 0	2 9 3	0 10 9	0 4 11	97 18 6
5th	3 0 0	2 9 0	0 11 0	0 4 11	97 7 6
6th	3 0 0	2 8 8	0 11 4	0 4 10	96 16 2
7th	3 0 0	2 8 5	0 11 7	0 4 10	96 4 7
8th	3 0 0	2 8 1	0 11 11	0 4 10	95 12 8
9th	3 0 0	2 7 10	0 12 2	0 4 9	95 0 6
10th	3 0 0	2 7 6	0 12 6	0 4 9	94 8 0
11th	3 0 0	2 7 2	0 12 10	0 4 9	93 15 2
12th	3 0 0	2 6 11	0 13 1	0 4 8	93 2 1
13th	3 0 0	2 6 7	0 13 5	0 4 8	92 8 8
14th	3 0 0	2 6 3	0 13 9	0 4 7	91 14 11
15th	3 0 0	2 5 10	0 14 2	0 4 7	91 0 9
16th	3 0 0	2 5 6	0 14 6	0 4 7	90 6 3
17th	3 0 0	2 5 2	0 14 10	0 4 6	89 11 5
18th	3 0 0	2 4 9	0 15 3	0 4 6	88 16 2
19th	3 0 0	2 4 5	0 15 7	0 4 5	88 0 7
20th	3 0 0	2 4 0	0 16 0	0 4 5	87 4 7
21st	3 0 0	2 3 7	0 16 5	0 4 4	86 8 2
22nd	3 0 0	2 3 2	0 16 10	0 4 4	85 11 4
23rd	3 0 0	2 2 9	0 17 3	0 4 3	84 14 1
24th	3 0 0	2 2 4	0 17 8	0 4 3	83 16 5
25th	3 0 0	2 1 11	0 18 1	0 4 2	82 18 4
26th	3 0 0	2 1 6	0 18 6	0 4 2	81 19 10
27th	3 0 0	2 1 0	0 19 0	0 4 1	81 0 10
28th	3 0 0	2 0 6	0 19 6	0 4 1	80 1 4
29th	3 0 0	2 0 0	1 0 0	0 4 0	79 1 4
30th	3 0 0	1 19 6	1 0 6	0 3 11	78 0 10
31st	3 0 0	1 19 0	1 1 0	0 3 11	76 19 10
32nd	3 0 0	1 18 6	1 1 6	0 3 10	75 18 4
33rd	3 0 0	1 18 0	1 2 0	0 3 10	74 16 4
34th	3 0 0	1 17 5	1 2 7	0 3 9	73 13 9
35th	3 0 0	1 16 10	1 3 2	0 3 8	72 10 7
36th	3 0 0	1 16 3	1 3 9	0 3 7	71 6 10
37th	3 0 0	1 15 8	1 4 4	0 3 7	70 2 6
38th	3 0 0	1 15 1	1 4 11	0 3 6	68 17 7
39th	3 0 0	1 14 5	1 5 7	0 3 5	67 12 0
40th	3 0 0	1 13 10	1 6 2	0 3 5	66 5 10
41st	3 0 0	1 13 2	1 6 10	0 3 4	64 19 0

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS FOR EVERY ONE HUNDRED POUNDS OF THE LOAN—*continued.*

Half-year.	Prescribed Half-yearly Instalment.	Apportioned thus:		½ per Cent. Rebate of Interest.	Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
42nd	3 0 0	1 12 6	1 7 6	0 3 3	63 11 6
43rd	3 0 0	1 11 9	1 8 3	0 3 2	62 3 3
44th	3 0 0	1 11 1	1 8 11	0 3 1	60 14 4
45th	3 0 0	1 10 4	1 9 8	0 3 0	59 4 8
46th	3 0 0	1 9 7	1 10 5	0 2 11	57 14 3
47th	3 0 0	1 8 10	1 11 2	0 2 11	56 3 1
48th	3 0 0	1 8 1	1 11 11	0 2 10	54 11 2
49th	3 0 0	1 7 3	1 12 9	0 2 9	52 18 5
50th	3 0 0	1 6 6	1 13 6	0 2 8	51 4 11
51st	3 0 0	1 5 8	1 14 4	0 2 7	49 10 7
52nd	3 0 0	1 4 9	1 15 3	0 2 6	47 15 4
53rd	3 0 0	1 3 11	1 16 1	0 2 5	45 19 3
54th	3 0 0	1 3 0	1 17 0	0 2 4	44 2 3
55th	3 0 0	1 2 1	1 17 11	0 2 2	42 4 4
56th	3 0 0	1 1 1	1 18 11	0 2 1	40 5 5
57th	3 0 0	1 0 2	1 19 10	0 2 0	38 5 7
58th	3 0 0	0 19 2	2 0 10	0 1 11	36 4 9
59th	3 0 0	0 18 1	2 1 11	0 1 10	34 2 10
60th	3 0 0	0 17 1	2 2 11	0 1 8	31 19 11
61st	3 0 0	0 16 0	2 4 0	0 1 7	29 15 11
62nd	3 0 0	0 14 11	2 5 1	0 1 6	27 10 10
63rd	3 0 0	0 13 9	2 6 3	0 1 4	25 4 7
64th	3 0 0	0 12 7	2 7 5	0 1 3	22 17 2
65th	3 0 0	0 11 5	2 8 7	0 1 2	20 8 7
66th	3 0 0	0 10 3	2 9 9	0 1 0	17 18 10
67th	3 0 0	0 9 0	2 11 0	0 0 11	15 7 10
68th	3 0 0	0 7 8	2 12 4	0 0 9	12 15 6
69th	3 0 0	0 6 5	2 13 7	0 0 8	10 1 11
70th	3 0 0	0 5 1	2 14 11	0 0 6	7 7 0
71st	3 0 0	0 3 8	2 16 4	0 0 4	4 10 8
72nd	3 0 0	0 2 4	2 17 8	0 0 3	1 13 0
73rd	1 13 10	0 0 10	1 13 0	0 0 1	..

The mortgagor under the instalment system may pay to the Superintendent at any time, and under the fixed-loan system on any half-yearly due date, the whole balance of principal owing, with interest to date of payment, and obtain a discharge of the mortgage on payment of the fee prescribed for such discharge.

The mortgagor may also from time to time pay to the Superintendent, in addition to the half-yearly payments, sums of £5 or a multiple of £5, and in the case of fixed loans such deposits are applied in reduction of the advance, and interest is charged on the balance only; or, if the mortgagor so directs, such deposits are held on his behalf and applied in payment of the half-yearly instalments of interest as they fall due.

In the case of an instalment loan, money paid in advance by a mortgagor is applied in one of the following methods, according as he directs:—

(*a.*) It may be held on his behalf and applied in payment of the half-yearly instalments (consisting partly of interest and partly of principal) as they fall due, until the deposit is exhausted.

(*b.*) It may be applied at once in payment of as many future half-yearly instalments of principal (but not of interest) as it will cover, and, as far as such instalments are concerned, the corresponding interest will not be charged. On the next half-yearly date, however, the mortgagor will be required to continue his payments as before, the advance payment having the effect of reducing the period (thirty-six years and a half) during which he would have to pay such instalments. For instance, a mortgagor has a loan of £100: On the due date of his eighth half-yearly instalment he pays, in addition to the amount due, a sum of £5. This is applied in payment of his ninth, tenth, eleventh, twelfth, thirteenth, fourteenth, and fifteenth instalments of principal—12s. 2d., 12s. 6d., 12s. 10d., 13s. 1d., 13s. 5d., 13s. 9d., 14s. 2d. (see table), making a total of £4 11s. 11d.—and the corresponding interest, £2 7s. 10d., £2 7s. 6d., £2 7s. 2d., £2 6s. 11d., £2 6s. 7d., £2 6s. 3d., £2 5s. 10d., is not charged. A balance of 8s. 1d. remains in his favour. Then on the next due date he has to make the half-yearly payment as usual (less 8s. 1d.), but, instead of being the ninth, it counts as the sixteenth instalment, and by this means the whole loan is repaid three years and a half earlier (seven half-yearly payments) than it otherwise would be.

(*c*). It may be applied as explained in the next paragraph.

On the due date of any instalment, after at least one-tenth of the loan has been repaid, by means of the half-yearly instalments or of moneys repaid in advance, or both, the mortgagor (provided he is not in arrear with any instalment or other payment due under the mortgage) may, with the consent of the Superintendent, readjust the loan by treating the balance of principal then unpaid as a fresh loan duly granted on that date for a fresh term. But no readjustment is allowed unless the balance of unpaid principal amounts to at least £100. Under this arrangement the mortgagor will be relieved of paying interest on the original amount of the loan, and will pay only on the balance of principal not repaid.

Advance payments in reduction of the mortgage, unless made on the due date of a half-yearly payment, take effect only from the next due date.

The law-costs payable for preparing and completing the mortgages under the Act are as follow:—

Mortgages under "The Land Transfer Act, 1885."

Law-costs of perusing title, preparing and registering mortgage (to be deducted from the advance),—

	£	s.	d.
If advance be not exceeding £250	0	7	6
Exceeding £250, but not exceeding £500	0	10	0
Exceeding £500, but not exceeding £750	0	15	0
Exceeding £750, but not exceeding £1,000	1	1	0
Exceeding £1,000, but not exceeding £1,500 ..	1	6	0
Exceeding £1,500, but not exceeding £2,000 ..	1	11	6
Exceeding £2,000, but not exceeding £3,000 ..	1	17	6
With cash disbursements, which are the same in every case, namely,—			
Mortgage-forms	0	2	0
Search-fee (with an additional 2s. for every certificate of title after the first)	0	2	0
Registration (with an additional 2s. for every certificate of title after the first)	0	10	0

Mortgages under "The Deeds Registration Act, 1868."

Law-costs of perusing title, preparing and registering mortgage (to be deducted from the advance),—

	£	s.	d.
If advance be not exceeding £150	0	18	0
Exceeding £150, but not exceeding £250	1	0	6
Exceeding £250, but not exceeding £500	1	5	0
Exceeding £500, but not exceeding £750	1	13	0
Exceeding £750, but not exceeding £1,000	2	3	0
Exceeding £1,000, but not exceeding £1,500 ..	2	13	0
Exceeding £1,500, but not exceeding £2,000 ..	3	13	0
Exceeding £2,000, but not exceeding £3,000 ..	4	13	0
With cash disbursements,—			
Fee chargeable by solicitor not residing in registration centre for employing agent to register mortgage	0	5	0
Solicitor's charge for obtaining Land Board's consent to mortgage of leasehold land—			
If advance be not exceeding £250	0	2	0
Exceeding £250	0	5	0
Fee for partial or total discharge of mortgage ..	0	5	0
Fee for execution of consent by the Superintendent to any document	0	5	0
Fee for production of title-deeds held by the Superintendent	0	5	6

Solicitors are entitled to charge moderately for any services mortgagors may require over and above those provided for in the scale—such services, for example, as clearing encumbered titles, obtaining and registering titles, &c.

Valuation reports on the securities offered are made on behalf of the Department by expert land-valuers; and these reports, together with the corresponding valuations appearing in the district valuation-rolls, prepared in accordance with the provisions of "The Government Valuation of Land Act, 1896," and reports from the Commissioners of Crown Lands in the case of Crown leaseholds, are considered by the General Board. Board meetings are held weekly, or as occasion requires, and the Superintendent is bound by

the resolutions of the Board. A resolution is taken with regard to every application placed before the General Board, so that on the Board rests the responsibility of granting loans or of refusing to grant them.

Some applicants offer securities which are obviously not eligible; and in that event the valuation-fees paid are returned, the securities are not reported on, and the applications do not go before the Board.

By arrangements made with the Post Office, mortgagors are enabled to pay their instalments and interest to the credit of the Superintendent at any money-order office throughout the colony, and free of all costs for remitting the money to Wellington. This is an arrangement at once convenient and economical for the large number of persons scattered all over the colony who have financial dealings with the Advances to Settlers Office. Loans may also be repaid in full through the Post Office.

The officials of the Government Advances to Settlers Office are bound by declaration to observe secrecy respecting applications for advances, and are forbidden to give any information respecting the business of the Department except to officers appointed to assist in carrying out the provisions of the Act.

The Act provides penalties for persons employed in the business of the Advances to Settlers Office taking any fee or reward from an applicant for a loan under the Act; for persons acting as valuers of land in which they have a pecuniary interest; and for persons who may attempt to bribe any one employed under the Act. It should be understood that no commission, charge, or procuration fee is payable in connection with an application for a loan.

The first meeting of the General Board for the purpose of considering applications for loans was held on 23rd February, 1895; and up to the 31st March, 1903, the Board had authorised 12,922 advances, amounting to £4,316,940. The total amount applied for in the 12,922 applications granted in full and partially was £4,903,515. 1,629 applicants declined the partial grants offered to them, amounting to £735,280; so that the net advances authorised at 31st March, 1903, numbered 11,293, and amounted to £3,581,660. The security for the net authorised advances was valued at £7,849,728. The number of applications received up to 31st March, 1903, was 16,643, for an aggregate amount of £5,927,495.

THE LAND-TAX AND INCOME-TAX.

By "The Land and Income Assessment Act, 1891," a system of taxation was instituted on the unimproved value of land and the capital value of mortgages of land, in conjunction with a tax on incomes in excess of £300 a year. Various amending Acts were passed from time to time, and in 1900 the law was consolidated in one measure—"The Land and Income Assessment Act, 1900."

Eleven years' taxation on this basis has now been collected to date, and it may be safely claimed that the system has, from a financial point of view, been a success, and that the revenue is collected practically without friction.

THE LAND-TAX.

In 1902–1903 the rate of land-tax in respect of mortgages was reduced from one penny in the pound to three farthings. This represented a reduction of revenue to the extent of £30,000. Part of this loss was recouped by revised valuations made, which produced an increase of £13,000, and the yield for 1902–1903 was, in round figures, £296,000, of which the ordinary land-tax was £217,000 and the graduated tax (including the special tax on absentee land-owners) £79,000. It will therefore be seen from these figures that if the mortgage-tax had not been reduced the yield from the land-tax would have been £326,000, as against £313,000 in 1901–1902.

For the purposes of the "ordinary" land-tax, owners are allowed under the Act to deduct from the total unimproved value of their land the amount of any registered mortgage thereon, and the mortgagees are required to make a return of all their mortgages. In the case of uncompleted sales, where the title has not been transferred the amount of unpaid purchase-money is treated as a mortgage—that is, it may be deducted by the purchaser and must be included in the return made by the vendor.

An owner of land the unimproved value of which, together with mortgages owing to him, does not exceed £1,500 (after deducting mortgages owing by him) is allowed an exemption of £500, but where such value exceeds £1,500 the exemption diminishes by £1 for every £2 that such value increases, so that no exemption is allowable when £2,500 is reached.

The Act contains a provision that in cases where the income from any land or mortgages, *plus* income from all other sources, is less than £200 per annum, and the owner is incapacitated by age or infirmity from supplementing such income, a further exemption may be allowed by the Commissioner upon his being satisfied that the payment of the tax would entail hardship on such owner. This discretionary power has been exercised in a considerable number of instances, especially in the case of widows and orphans with small means, and much hardship prevented.

All mortgages are assessed at their full nominal value, except where it is satisfactorily shown that owing to depreciation of the security or other cause such value has been diminished. In the case of mixed mortgages—that is, mortgages which are secured on both real and personal property—the amount of the mortgage chargeable with land-tax is taken to be the assessed value of the land included in the security, the interest derived from the balance of mortgage being liable to income-tax.

It will be readily seen that the deductions and exemptions which have been referred to materially reduce the number of taxpayers as compared with the number of land-owners, the latter being upwards of 115,000, whilst the former only number about 18,500.

If the unimproved value of land in any assessment amounts to £5,000 or over, graduated tax is payable thereon according to the scale given on another page. Mortgages, however, are not chargeable with the graduated tax; but, on the other hand, no deduction is allowed in an assessment for graduated tax in respect of any mortgage owing on the land.

Twenty per cent. additional on the amount of the graduated tax is levied where the owners have been resident out of the colony for a period of not less than one year next preceding the date of the passing of the annual taxing Act.

Native lands which are occupied by Europeans are subject to the ordinary tax, it being considered that as such lands have benefited equally with the lands of Europeans by the expenditure of public money, they should bear some proportion of the taxation. But, recognising that in some instances, where the interests of the Native owners are small, the collection of the tax might possibly entail some hardship, the Legislature decided that only half the usual rate should be collected on such lands. Graduated tax is not chargeable on Native land

The Income-tax.

Both the number of income-tax payers and the amount of tax received may appear at first sight smaller than might be expected from the population of New Zealand, but it should be remembered that incomes from land and mortgages are exempt, the unimproved value of the former and the capital value of the latter being chargeable with land-tax in the manner hereinbefore explained. The statutory exemption of £300, *plus* life-insurance premiums up to £50, renders a very large number of employees and small traders exempt from the tax. Companies pay the tax on profits, and dividends are not returnable by their shareholders. These circumstances will account for the smallness of the number (7,200) subject to income-tax and, to a certain extent, the comparatively inconsiderable contribution to the revenue.

Objections to income assessments are heard in private before the Stipendiary Magistrate.

It is impossible to indicate the number and variety of questions which arise daily in connection with income assessments, or to give a full account of how they are dealt with.

Amongst the questions to which special attention has been given is that of the depreciation of plant and machinery, and the amount to be allowed as a deduction under this heading. The Amendment Act of 1894 admitted, amongst deductions, an allowance for depreciation of plant and machinery over and above what may be claimed as repairs and renewals, and this allowance is

maintained in the Act of 1900. The allowance is, by law, fixed at what may be considered just by the Commissioner; but the Chief Inspector of Machinery is, in this matter, the expert adviser of the Department, and he fixes the rates to be allowed. There have been naturally some differences of opinion between owners of machinery and the Department, but only in the case of steam-vessels has the Inspector found it necessary to alter the scale first laid down. The rule formulated for the Inspector's guidance is as follows:—

An allowance to be made of such an amount (over and above what is expended in renewals and repairs) as will equal the annual loss of profit-earning power.

This is not intended to provide for the loss of capital invested, but simply represents the annual loss through wear and tear (as affecting income-earning capacity), other than that which can be made good by renewals of parts and repairs.

Obsolete machinery is also allowed for when the machinery has been actually discarded; and here the amount to be allowed must bear the same proportion to the whole loss as the time the tax has been in operation bears to the life of the machine. An engine discarded in the tenth year of the tax—the life of the engine being, say, twenty years—would be allowed for to one-half of the loss incurred, less the annual amounts that have been allowed by the Department for depreciation during ten years. Machinery superseded by something better, but kept in reserve in case of a breakdown, is not allowed for.

In the consolidating Act of 1900, before referred to, a further allowance is made to taxpayers who occupy their own freehold or leasehold premises. Such taxpayers are now entitled to deduct a sum at the rate of 5 per cent. on the capital value of their interest in the land or improvements thereon. This concession is intended to remove an anomaly which previously existed as between a taxpayer in business who occupied premises for which he paid rent and one who occupied his own freehold, or premises erected on leasehold ground. In the first case rent was deducted, and in the hands of the landlord was not taxable, being income derived from land; in the second case the allowance was limited under the then existing law to 5 per cent. on the amount on which land-tax was paid. This might be nothing, and in the case of premises on leasehold land no allowance could then be made. As an equivalent of the rent paid by a tenant, a freeholder is now allowed a deduction of 5 per cent. on the capital value of his business premises; while a leaseholder, who was previously entitled to deduct his ground-rent only, is now allowed a further deduction of 5 per cent. on the capital value of any leasehold interest he may own in his business premises. Mortgage interest, however, is not now deductible. The deduction of 5 per cent. on the capital value of the taxpayer's interest in his business premises precludes any further deduction. The effect of the provision is to exclude land, with its profit or loss, from the income-tax system.

It should be mentioned here that the statutory exemption of £300 is not allowed to absentees, whether firms or individuals, nor in any case to companies.

Regulations have been issued for levying income-tax on the profits earned by shipowners whose headquarters are beyond the colony. The plan adopted is to require a return of the outward freight and passenger lists, and to levy tax at the rate of one shilling in the pound upon 5 per cent. of the total returned.

Yield of Tax.

The yield of land-tax and income-tax for the last five years has, in round figures, been as follows:—

Year.	Land-tax.	Income-tax.
	£	£
1898–9	298,000	115,500
1899–1900	294,000	129,000
1900–1	294,000	173,000
1901–2	313,000	179,000
1902–3	296,000	201,000

Rates of Tax.

The rates of tax at present are as follow: The ordinary land-tax is 1d. in the pound; the graduated tax commences at £5,000, at ⅛d. in the pound on the unimproved value, and rises to 2d. where the unimproved value of an owner's land is £210,000, or exceeds that sum. The ordinary tax on Native land occupied by Europeans is ½d. in the pound. For taxpayers other than companies the rate of income-tax is 6d. in the pound on the first taxable £1,000—that is, after deducting the £300 exemption—and 1s. in the pound on any excess over £1,000. A person having an annual income of £1,900 would be thus taxed: £300 would be exempted; £1,000 would pay 6d. in the pound; and the remaining £600, 1s. in the pound: making a total of £55 a year. The tax on an income of £400 would be at 6d. on £100, equal to £2 10s. Income-tax is payable by companies, at the uniform rate of 1s. in the pound.

The schedule of rates of graduated land-tax is as follows:—

Where the value is	£5,000 and is less than £10,000,	one-eighth of a penny in the pound sterling.
Where the value is	£10,000 and is less than £15,000,	two-eighths of a penny in the pound sterling.
Where the value is	£15,000 and is less than £20,000,	three-eighths of a penny in the pound sterling.
Where the value is	£20,000 and is less than £25,000,	four-eighths of a penny in the pound sterling.
Where the value is	£25,000 and is less than £30,000,	five-eighths of a penny in the pound sterling.
Where the value is	£30,000 and is less than £40,000,	six-eighths of a penny in the pound sterling.
Where the value is	£40,000 and is less than £50,000,	seven-eighths of a penny in the pound sterling.
Where the value is	£50,000 and is less than £70,000,	one penny in the pound sterling.

Where the value is £70,000 and is less than £90,000, one penny and one-eighth of a penny in the pound sterling.

Where the value is £90,000 and is less than £110,000, one penny and two-eighths of a penny in the pound sterling.

Where the value is £110,000 and is less than £130,000, one penny and three-eighths of a penny in the pound sterling.

Where the value is £130,000 and is less than £150,000, one penny and four-eighths of a penny in the pound sterling.

Where the value is £150,000 and is less than £170,000, one penny and five-eighths of a penny in the pound sterling.

Where the value is £170,000 and is less than £190,000, one penny and six-eighths of a penny in the pound sterling.

Where the value is £190,000 and is less than £210,000, one penny and seven-eighths of a penny in the pound sterling.

Where the value is £210,000 or exceeds that sum, twopence in the pound sterling.

"THE GOVERNMENT VALUATION OF LAND ACT, 1896."

THE above Act provides for the periodical valuation of all landed properties in New Zealand, and for that purpose the colony is divided into special districts.

The first valuation was made as at 31st March, 1898, since which date valuations in many parts of the colony have been revised as circumstances required. An Amendment Act passed during the session of 1900 contains the amendments which four years' experience of the original Act showed to be desirable. As the principle of the original Act remains unaltered, the amendments are practically confined to the machinery clauses and the clearer definition of terms.

The valuations are used for the following purposes: Land-tax, local rates (in cases where rates are levied on the capital or on the unimproved value), stamp duties, and duties under "The Deceased Persons' Estates Duties Act, 1881"; for advances and investments on mortgage of land made by the Post Office, Government Insurance Department, Public Trust Office, Government Advances to Settlers Office, and the Commissioners of the Public Debts Sinking Funds. The valuation is also used for the guidance of the Government in transactions under "The Land for Settlements Act, 1894," and "The Public Works Act, 1894."

Valuations are supplied by the Department on payment of the prescribed fee.

The cost of making the valuation is borne principally by the Valuation Department, the Land- and Income-tax Department, the Advances to Settlers Office, and the local authorities using the valuation, while separate fees, for supplying individual valuations to those requiring them, are charged by regulation.

RATING ON UNIMPROVED VALUE OF LAND.

"THE Rating on Unimproved Value Act, 1896," was passed by the General Assembly to afford local bodies the opportunity of adopting the principle of rating which is expressed in the title of the measure. It is entirely at the option of the bodies to adopt the system, and provision is made for a return to the old system of rating, if desired, after three years' experience of the new one. The Act provides that a proportion of the ratepayers on the roll, varying from 25 per cent. where the total number does not exceed 100, to 15 per cent. where the number exceeds 300, may by demand in writing, delivered to the chairman of the district, require that a proposal to rate property on the basis of the unimproved value may be submitted to the ratepayers, whose votes shall be taken between twenty-one and twenty-eight days after delivery of the demand. The poll is to be taken in the same manner as in case of a proposal to raise a loan in the district under "The Local Bodies' Loans Act, 1886."

Under the original Act it was necessary for a minimum number of one-third of the ratepayers to vote, and a majority of their votes carried the proposal. Now, under "The Municipal Corporations Act, 1900," the question of adoption or otherwise is decided by a bare majority of the valid votes recorded, irrespective of the number of ratepayers who have voted.

A rescinding proposal can be carried at a poll by the same means as one for adoption, but not until after three years have elapsed, and, *vice versâ*, rejection of a proposal bars its being again brought forward for a similar period. However, in the case of past polls at which the proposal to adopt the Act was rejected solely on account of an insufficient number of ratepayers recording their votes, it is now provided that a new poll may be held at any time.

The valuation-roll is supplied to the local authority by the Valuer-General under the provisions of "The Government Valuation of Land Act, 1896," and its amendment of 1900, and the definitions of "capital value," "improvements," "unimproved value," and "value of improvements" found in these Acts apply also to the Rating on Unimproved Value Act. Provision is made for adjustment of rating powers given under previous Acts to the Act of 1896 by fixing equivalents. Thus a rate of 1s. in the pound on the annual value under former Acts is to be considered equal to ¾d. in the pound on the capital value under the Act of 1896.

The adjustments are to be made so that the rates on the unimproved value shall be such as to produce as much as, but not more than, the rates under "The Rating Act, 1894." For instance, supposing a local authority has a rating power up to ¾d. in the pound on the capital value, then it can levy any rate in the pound on the unimproved value of land in its district *so long as the producing capacity of such rate is not greater than would be the producing capacity*

of a ¾d. rate on the capital value of the district. When a fixed rate, under the older system of rating, is security for a loan, the Controller and Auditor-General is given power to interfere and fix the new rate himself if of opinion that the new rate on the unimproved value does not afford equally good security to the one to be given up.

The operation of the Act does not apply to water, gas, electric light, sewage, nor hospital and charitable aid rates.

Up to the present time (31st March, 1903) the local bodies that have submitted the question of the adoption of the Act to the ratepayers are as follow:—

"RATING ON UNIMPROVED VALUE ACT, 1896."

	*Results of Polls.	*Votes recorded.*		
		For.	Against.	Informal.
Ashburton Borough ..	Rejected ..	102	199	4
Auckland City	" ..	753	1,697	..
Balclutha Borough ..	Carried ..	60	33	..
Cheviot County	" ..	165	41	..
Christchurch Borough ..	" ..	596	512	..
Devonport Borough ..	" ..	356	109	..
Eketahuna County ..	" ..	149	21	1
Feilding Borough ..	" ..	268	56	1
Foxton Borough	Rejected ..	53	98	4
Gore Borough	Carried ..	122	67	5
Grey Lynn Borough ..	" ..	140	71	2
Greymouth Borough ..	" ..	214	48	1
Hamilton Borough ..	" ..	77	52	..
Hastings Borough ..	Rejected ..	250	265	15
Hokianga County ..	Carried ..	109	25	6
Hokitika Borough ..	" ..	212	53	3
Hunua Road District ..	" ..	60	2	..
Inangahua County ..	" ..	284	11	2
Invercargill Borough ..	" ..	386	174	4
Karori Borough	" ..	93	3	1
Linwood Borough ..	" ..	276	38	2
Lower Hutt Borough ..	" ..	94	68	4
Manawatu Road District ..	" ..	105	10	..
Maraetai Road District ..	" ..	16	..	..
Mareretu Road District ..	" ..	24	..	..
Masterton Borough ..	" ..	221	139	6
Melrose Borough	" ..	236	40	6
Mosgiel Borough	Rejected ..	58	87	1
Normanby Town District ..	Carried ..	82	56	3
North Invercargill Borough	" ..	107	24	2
Onslow Borough	" ..	140	8	..
Pahiatua Borough ..	" ..	136	38	1
Pahiatua County ..	" ..	350	31	3
Palmerston North Borough	" ..	402	12	3
Papakura Road District ..	" ..	30	1	..
Pelorus Road District ..	" ..	98	41	..
Petone Borough	†Rejected ..	100	134	4
Picton Borough	" ..	27	73	1
Raglan County	†Carried ..	116	85	2
St. Albans Borough ..	" ..	350	218	15
South Invercargill Borough	" ..	106	54	1
Southland County ..	" ..	919	574	..
Spreydon Road District ..	" ..	141	57	4

*Date of polls will be found in a special table in Statistical Vol. for 1902. †New poll taken under Act of 1900.

"RATING ON UNIMPROVED VALUE ACT, 1896"—*continued.*

	Results of Polls.	*Votes recorded.*		
		For.	Against.	Informal.
Stratford County ..	Carried	399	23	2
Stratford Borough ..	"	137	64	1
Sumner Borough ..	* "	91	19	..
Sydenham Borough ..	"	353	193	..
Tauranga County ..	"	90	13	2
Taratahi-Carterton Road District	"	261	53	..
Timaru Borough	Rejected	93	246	5
Waimate Borough ..	Carried	235	61	14
Waimate County	"	368	162	..
Waipawa County	"	462	28	3
Wairarapa North County ..	Rejected	331	68	10
Wairarapa South County ..	Carried	187	8	..
Wellington City	"	1,261	591	..
Winton Borough	"	39	33	1
Woodville Borough ..	"	175	7	1
Woolston Borough ..	* "	252	190	7

* New poll taken under Act of 1900.

OLD-AGE PENSIONS.

IN 1898 a Bill, introduced into Parliament by the Right Hon. R. J. Seddon, Prime Minister, became law,* which provided for the payment of an old-age pension out of the Consolidated Fund (revenue of the General Government) to persons duly qualified, without contribution by the beneficiaries. The Act, however, only provided for payments out of revenue, for the purposes of the pensions, until the close of the second session of the late Parliament. [*By amendment passed in 1900 the limit as to time of the operation of the principal Act is rescinded, and the authority to pay made absolute.*] The conditions under which pension is granted are set forth in sections 7, 8, and 64 of the statute, as under:—

7. Subject to the provisions of this Act, every person of the full age of sixty-five years or upwards shall, whilst in the colony, be entitled to a pension as hereinafter specified.

8. No such person shall be entitled to a pension under this Act unless he fulfils the following conditions, that is to say:—

(1.) That he is residing in the colony on the date when he establishes his claim to the pension; and also

(2.) That he has so resided continuously for not less than twenty-five years immediately preceding such date:

Provided that continuous residence in the colony shall not be deemed to have been interrupted by occasional absence therefrom unless the total period of all such absence exceeds two years; nor, in the case of a seaman, by absence therefrom whilst serving on board

* A Bill had been previously introduced in 1897, which, as amended by the lower branch of the Legislature, was transmitted to the Legislative Council, but thrown out by that body.

As a preliminary to the introduction of the Bill in 1897, an Act entitled "The Registration of People's Claims Act" was passed in 1896, under which persons aged sixty-five years or upwards, having resided twenty years in the colony, and whose income did not exceed £50 per annum, were allowed for a limited time to send in pension-claims. This Act was subsequently repealed, and all certificates granted under it cancelled, by the Old-age Pensions Act of 1898.

a vessel registered in and trading to and from the colony if he establishes the fact that during such absence his family or home was in the colony [*By amendment passed in 1900, as an alternative condition in respect of residence an absence of four years from the colony is allowed, provided that the claimant was not absent during the year ended 31st October, 1898, and provided that the total period of actual residence is not less than twenty-five years*] ; and also

(3.) That during the period of twelve years immediately preceding such date he has not been imprisoned for four months, or on four occasions, for any offence punishable by imprisonment for twelve months or upwards, and dishonouring him in the public estimation ; and also

(4.) That during the period of twenty-five years immediately preceding such date he has not been imprisoned for a term of five years with or without hard labour for any offence dishonouring him in the public estimation ; and also

(5.) That the claimant has not during the period of twelve years immediately preceding such date (Amendment Act, 1902), for a period of six months or upwards, if a husband, deserted his wife, or without just cause failed to provide her with adequate means of maintenance, or neglected to maintain such of his children as were under the age of fourteen years ; or, if a wife, deserted her husband or such of her children as were under that age :

Provided that, if the pension-certificate is issued, the pensioner's rights thereunder shall not be affected by any disqualification contained in this subsection unless the fact of such disqualification is established at any time to the satisfaction of a Stipendiary Magistrate ; and also

(6.) That he is of good moral character, and is, and has for five years immediately preceding such date been, leading a sober and reputable life ; and also

(7.) That his yearly income does not amount to fifty-two pounds or upwards, computed as hereinafter provided [*By amendment passed in 1900 the property and income of husband and wife is to be computed as belonging to them jointly, and their united yearly incomes, including the pension, is limited to £78*] ; and also

(8.) That the net capital value of his accumulated property does not amount to two hundred and seventy pounds or upwards, computed and assessed as hereinafter provided ; and also

(9.) That he has not directly or indirectly deprived himself of property or income in order to qualify for a pension. [*By amendment passed in 1901, it is provided that, if during the currency of a pension a pensioner becomes possessed of any property or income in excess of what is allowed in respect of the amount of pension granted, the pension can on application be confirmed, cancelled, or varied in amount by the Magistrate. Provision is also made for the recovery of sums paid in pensions exceeding the amount allowed by law. The Amenament Act of 1902 provides that where the applicant is owner of his (her) residence, not over £300 value, it may be conveyed to the Public Trustee, and the value deducted from the capital value of the accumulated property in computing the pension. The Public Trustee permits the pensioner to reside on the property rent free during life, and, if he or she dies leaving wife or husband who is entitled to a pension, then during life of survivor. Provision is made for dealing with such property on death of pensioner or survivor, and for retransfer of property to pensioner if desired*] ; and also

(10.) That he is the holder of a pension-certificate as hereinafter provided.

64. This Act, in so far as it provides for the granting of pensions, shall not apply to—

(1.) Aboriginal natives of New Zealand to whom moneys other than pensions are paid out of the sums appropriated for Native purposes by "The Civil List Act, 1863" ; nor to

(2.) Aliens; nor to
(3.) Naturalised subjects, except such as have been naturalised for the period of five years next preceding the date on which they establish their pension-claims [*By amendment passed in 1900, in the case of naturalised persons the term of qualification preceding the establishment of a pension-claim is reduced from five years to one*]; nor to
(4.) Chinese or other Asiatics, whether naturalised or not.

If, in the opinion of a Magistrate adjudicating, it would be more advantageous for a Maori applying for a pension to receive an allowance out of the moneys appropriated for Native purposes, he may, in lieu of granting pension, make recommendation accordingly to the Native Minister. A Magistrate may, in granting a pension to a Maori, direct that it be paid to some Government officer for the benefit of the applicant.

The full pension is £18 a year, payable in twelve monthly instalments; but for each £1 of income above £34, also for each £15 of accumulated property above £50, £1 is deducted from the amount of the pension.

The first instalment of the pension is payable on the first day of the month next but one following the date of the certificate.

For the administration of the Act the colony is divided into seventy-four districts, for each of which there is a Deputy Registrar, controlled by a Chief Registrar at Wellington.

All applicants for a pension have now to fill in the answers to a set of questions on a new claim form, and to come before the Deputy-Registrar if physically fit to do so. The Deputy-Registrar then verifies the answers given by a set of inquiry forms provided for the purpose, and when this has been done to the satisfaction of that officer the applicant appears, as required by the Act, before the Stipendiary Magistrate, who may grant or reject the claim according to the evidence. All pensioners already on the books are being given the opportunity, when they come for renewal this year, to answer a similar set of questions, the answers to which are verified as in the case of a new claim.

The particulars of pensions granted are entered on a weekly return form, which, with the Magistrate's certificate, is sent to the Chief Registrar for entry in the General Register of Old-age Pensions.

The particulars of instalments falling due are advised to the General Post Office on a schedule. Advice, authorising payment, is then issued to the Postmaster at the money-order office at which the pensioner desired the instalment to be paid. At frequent intervals the Accountant of the General Post Office furnishes a statement of the payments made, from which the monthly instalments are entered on a card bearing the name of the pensioner.

At the due date of the instalment the pensioner may present his certificate for payment at the money-order office named in the certificate. A pensioner failing to collect his instalment within twenty-one days forfeits the amount, but may apply for a warrant of waiver within fourteen days of such forfeiture. [*By amendments passed in 1900 and 1901 the currency of each instalment is for one calendar*

month, with power to the Colonial Treasurer to extend the period in special cases.] If a pensioner is unable, through sickness or other reasonable cause, to collect his pension, he may apply to have an agent appointed to receive the instalments on his behalf. Should a pensioner desire to change the office of payment an application is to be made to the Deputy Registrar for the district in which the pension is registered. The change is advised to the Chief Registrar by telegram, who notifies the postal authorities. A transfer of a pension-certificate from one district to another is effected by the Deputy Registrar for the district in which the pension is registered sending a warrant to the Deputy Registrar for the district to which the transfer is made.

The decease of all persons of the age of sixty-five years and upwards is notified to the Chief Registrar by the Registrars of Deaths in the various districts. By amendment passed in 1900 the right of pensioners to admission to charitable institutions is protected.

All matters affecting the payment of pensions are reported by the Deputy Registrars from time to time.

The Act came into force on 1st November, 1898. The appointment of a Registrar followed; and in December the old-age pension districts were constituted, and Deputy Registrars appointed for them. By the 31st March, 1899, there were 7,443 pensions, which represented a yearly payment of £128,082. A year later the number of pensions in force was 11,285, representing a yearly payment of £193,718. On the 31st March, 1901, the number in force was 12,405, the yearly payment for these being £211,965; on the 31st March, 1902, there were 12,776 pensions, and the amount was £217,192; and on the 31st March, 1903, the number in force was 12,481 (including 892 Maoris), representing a liability of £211,594.

The number of pensions in force in each of the old-age pension districts was:—

NUMBER AND ANNUAL VALUE OF PENSIONS GRANTED TO EUROPEANS AND MAORIS IN FORCE ON THE 31ST MARCH, 1903.

District.	Number.		Annual Value.
	European.	Maoris.	
			£ s. d.
Auckland	974	8	16,556 0 0
Coromandel	86	37	2,183 0 0
Dargaville	64	..	1,114 0 0
Hamilton	149	11	2,659 0 0
Helensville	240	6	4,252 0 0
Kaitaia	17	44	1,013 0 0
Mangonui	10	19	489 0 0
Maungaturoto	39	..	598 0 0
Otahuhu	222	13	3,783 0 0
Raglan	9	50	1,009 0 0
	14	87	1,678 0 0

NUMBER AND ANNUAL VALUE OF PENSIONS GRANTED—*continued.*

District.	Number.		Annual Value.		
	European.	Maoris.	£	s.	d.
Rotorua	6	51	1,019	0	0
Russell	61	96	2,581	0	0
Taupo	..	33	573	0	0
Warkworth	68	2	1,086	0	0
Whangarei	138	3	2,405	0	0
Whangaroa	15	28	745	0	0
Thames	247	11	4,413	0	0
Opotiki	13	24	642	0	0
Paeroa	55	6	1,065	0	0
Tauranga	32	43	1,293	0	0
Te Aroha	35	1	624	0	0
Whakatane	8	65	1,312	0	0
Gisborne	62	34	1,603	0	0
Port Awanui	5	16	378	0	0
Napier	269	2	4,589	0	0
Dannevirke	146	1	2,447	0	0
Waipawa	23	..	401	0	0
Wairoa	9	54	975	0	0
New Plymouth	185	20	3,429	0	0
Stratford	30	..	494	0	0
Wanganui	193	16	3,587	0	0
Hawera	59	4	1,116	0	0
Marton	77	10	1,476	0	0
Patea	20	3	403	0	0
Wellington	534	4	9,382	0	0
Feilding	92	7	1,653	10	0
Greytown	82	2	1,412	0	0
Masterton	87	1	1,483	0	0
Otaki	51	13	1,089	0	0
Pahiatua	32	..	504	0	0
Palmerston North	162	7	2,852	0	0
Nelson	267	4	4,364	0	0
Motueka	80	..	1,291	0	0
Blenheim	163	3	2,747	0	0
Havelock	8	..	135	0	0
Christchurch	1,208	6	20,384	0	0
Akaroa	41	7	808	0	0
Amberley	9	..	158	0	0
Ashburton	195	..	3,340	0	0
Culverden	4	..	63	0	0
Kaiapoi	274	6	4,628	0	0
Kaikoura	22	2	402	0	0
Timaru	146	..	2,504	0	0
Fairlie	6	..	100	0	0
Geraldine	126	7	2,227	0	0
Waimate	102	2	1,711	0	0
Greymouth	473	..	8,173	0	0
Reefton	156	..	2,748	0	0
Hokitika	496	2	8,771	0	0
Westport	232	4	4,130	0	0
Oamaru	236	3	4,151	0	0
Dunedin	963	1	16,403	0	0
Balclutha	138	..	2,364	0	0

NUMBER AND ANNUAL VALUE OF PENSIONS GRANTED—*continued.*

District.	Number.		Annual Value.
	European.	Maoris.	
			£ s. d.
Clyde	100	..	1,776 0 0
Lawrence	206	..	3,487 0 0
Milton	131	..	2,157 0 0
Naseby	98	..	1,694 0 0
Palmerston South	60	..	994 0 0
Port Chalmers	177	6	2,970 0 0
Invercargill	605	1	10,197 0 0
Queenstown	112	..	1,944 0 0
Riverton	131	5	2,363 0 0
Chatham Islands	4	1	90 0 0
Total	11,589	892	£211,594 10 0

With the above, a statement of the cost of administration year by year is furnished, to show the initial and consequent expense. The Deputy Registrars of Old-age Pensions are mostly Clerks of Stipendiary Magistrate's Courts; the adjudication on claims is by the Magistrates; and the payments are made through the Postal Department.

COST OF ADMINISTRATION OF "THE OLD-AGE PENSIONS ACT, 1898," FOR THE FINANCIAL YEARS ENDED

—	31 March, 1899.	31 March, 1900.	31 March, 1901.	31 March, 1902.	31 March, 1903.
Salaries—	£	£	£	£	£
Registrar	100	100	100	100	621*
Deputy Registrars	40	150	200	219	279
Other expenses—					
Advertising and printing ..	16	..	..	..	..
Clerical assistance	248	1,124	1,209	1,328	1,730
Travelling-expenses and interpreters' fees	84	309	194	190	384
Shorthand-writer (S.M. Courts)	19	..	..	..	..
Contributions to Post Office ..	..	466	500	500	500
Contingencies	3	211	176	138	245
Rent of offices	..	..	36	60	46
Total	510	2,360	2,415	2,535	3,805

* Registrar and two clerks.

The following remarks are taken from the Registrar's report on the transactions for the year ended 31st March, 1903:—

"The number of pensions in force on the 31st March, 1903, was 12,481, representing a liability of £211,594—an average per pension of £16 19s. Of this number, 892 were Maoris.

"During the financial year just ended the number of new pensions granted was 1,386, including 62 Maoris. Five pensions, cancelled in the previous year, were reinstated.

"The total number of pensions voided during the year was 1,686, made up as follows: Deaths, 1,064; renewals not applied for, 278; renewals refused, 198; cancellations, 146. Maoris are represented in these figures by 103 deaths, 79 renewals not applied for, 38 renewals refused, and 11 cancellations.

"The total payments on account of pensions during the year amounted to £210,140 16s. 6d. Refunds direct to the Public Account of pension overpaid totalled £984 11s. 1d., leaving the net charge against the Act as £209,156 5s. 5d. A further refund of pension overpaid, totalling £55, was also obtained in stamps.

"The total amount of instalments for the year unpaid on the 31st March was £1,667 10s. 2d. Of this amount, £1,577 16s. 10d. represents absolutely forfeited instalments, the balance of £89 13s. 4d. being instalments the payment of which is in abeyance."

NUMBER OF PENSIONS GRANTED SINCE THE ACT CAME INTO OPERATION; NUMBER OF DEATHS, CERTIFICATES CANCELLED, PENSIONS LAPSED, AND RENEWALS REFUSED DURING EACH YEAR; AND NUMBER OF PENSIONS IN FORCE AT END OF EACH YEAR.

Year ended	Number of Pensions granted.	Number of Deaths of Pensioners.	Number of Pension-certificates cancelled.	Number of Renewals refused.	Number of Pensions lapsed.	Number of Pensions in Force at End of Year.
31 Mar., 1899	7,487	38	6	..	..	7,443
" 1900	4,699	786	28	37	6	11,285
" 1901	2,227	815	25	202	65	12,405
" 1902	1,694	935	54	152	182	12,776
" 1903	1,391*	1,064	146	198	278	12,481
Total ..	17,498	3,638	259	589	531	..

* Including five cancellations of the previous year reinstated.

COMPARATIVE STATEMENT OF PENSIONS IN FORCE, AND PAYMENTS MADE IN EACH FINANCIAL YEAR SINCE ACT CAME INTO OPERATION.

Date.	Number of Pensions in Force.	Payments to End of Financial Year.	Annual Increase in Expenditure.	Increase in Number of Pensions.	Decrease in Number of Pensions.
		£	£		
At March 31, 1899 ..	7,443	3,124	..	..	..
" 1900 ..	11,285	157,342	154,218	3,842	..
" 1901 ..	12,405	197,292	39,950	1,120	..
" 1902 ..	12,776	207,468	10,176	371	..
" 1903 ..	12,481	210,140	2,672*	..	295

		£
* Gross increase in expenditure during the financial year 1902-1903		2,672
Less—(1.) Refunds to Public Account by Court proceedings ...	£984	
(2.) Refunds by way of fine...	55	
(3.) Instalments due in 1901-1902 paid in 1902-1903	629	
	—	1,668
Net increase in expenditure		£1,004

AGES OF EUROPEAN PENSIONERS ON THE ROLLS AT 31ST MARCH, 1903.

At Age	Number	At Age	Number	At Age	Number
65 ..	492	78 ..	320	91 ..	12
66 ..	707	79 ..	261	92 ..	12
67 ..	876	80 ..	237	93 ..	3
68 ..	1,114	81 ..	164	94 ..	1
69 ..	1,355	82 ..	174	95 ..	1
70 ..	1,197	83 ..	176	96 ..	1
71 ..	825	84 ..	83	97 ..	1
72 ..	921	85 ..	54	98 ..	1
73 ..	642	86 ..	52	99 ..	1
74 ..	541	87 ..	56	100 ..	1
75 ..	471	88 ..	28	101 ..	1
76 ..	421	89 ..	22		
77 ..	347	90 ..	18		11,589

NEW ZEALAND CONSOLS.

THE purpose of "The New Zealand Consols Act, 1894," is, by providing for an inscription of such Consols, to give further facilities for the safe investment of savings. Practically, it establishes another branch of the Government Savings-Bank, with extended power of investment. Under section 3 the Colonial Treasurer is authorised to receive by way of deposits from persons in the colony sums of money up to £500,000 [*increased by £250,000 under provisions of section 2, Amendment Act, 1900*] ; but the amount deposited in any one year must not be more than £250,000. The currency of such deposits is not to exceed forty years. The present issue matures 1st February, 1910. The rate of interest must not exceed 4 per cent. The actual rate being paid is 3½ per cent. per annum.

Post-office money-order offices throughout the colony are made use of to receive applications for inscription, and also for payment of the half-yearly interest on the amounts deposited. The Receivers are the Postmasters, and the Registrar under the Act is the Secretary to the Treasury, Wellington.

Regulations have been issued, under which every deposit of money for inscription is to be accompanied by an application according to the form given further on, which is to be signed by the applicant and countersigned by the Receiver (Postmaster) taking the deposit. The person paying the money receives an interim receipt pending official acknowledgment from the Registrar at Wellington. The receipt subsequently given by the Registrar to the Consols-holder is not a negotiable document, or of monetary value, beyond its being proof of the deposit for purposes of inscription. A holder of Consols can obtain from the Registrar, on application and payment of 5s., a certified copy of any entry in the register relating to his deposit.

There is provision for the transfer of Consols from one holder to another on application being made to the Registrar according to the second form given, and payment of 1s. fee.

In case an inscriber desires to make use of his deposit, or any portion of it, to the extent of £5, or a multiple of £5, he can obtain a Consols certificate which is payable to bearer, and is transferable by delivery. This certificate entitles the holder to receive interest half-yearly at the same rate as the original inscription, and also to payment of the principal sum on the due date.

The application for the certificate must be according to the form appended, and the fee payable is 1s. for every one hundred pounds or aliquot part thereof expressed in the certificate. There is also a fee at the above rate for inscribing the amount of a Consols certificate. The form of Consols certificate is also given.

Interest on Consols for which no certificate has been issued is payable by warrant, and such warrants are transferable by indorsement in the manner provided in the form.

Interest on Consols for which a certificate has been issued is payable to the bearer of the certificate on presentation at any post-office money-order office, or at the Treasury, Wellington (see the last form).

The Act provides for the deposit of money by minors, which may be acceptable to parents as encouraging habits of thrift in children.

As stated previously, the present issue of Consols has a currency to the 1st February, 1910, and carries interest at the rate of three pounds ten shillings for every one hundred pounds deposited; and an assured investment of moneys bearing a fair rate of interest for so long a term should secure, when well known, a large portion of the deposits of our thrifty population.

Application for Inscription.

To the Registrar of Inscribed Consols,
Treasury, Wellington.

I [We], , of , having this day deposited at the sum of pounds shillings and pence, for investment in -per-cent. New Zealand Consols, hereby request that the same may be duly inscribed in the books of your office in the name of .

Signature of depositor:
Full address of depositor, together with name of nearest money-order office:

Dated at , this day of , 19 .

Deposit duly received as above.

Signature of Receiver: .

Application for Transfer.

In consideration of the sum of , the receipt whereof is hereby acknowledged, I [we], , of , do assign the sum of pounds shillings and pence, being my [our] interest or share in the New Zealand -per-cent. Inscribed Consols, under "The New Zealand Consols Act, 1894," and all my [our] property, right, and interest in and to the same, and the dividends thereon, unto , of , his [their] executors administrators, or assigns, and the Registrar is hereby requested to transfer the same accordingly. The prescribed fee of is enclosed herewith.

Witness my [our] hand , this day of , 19 .

Witnessed by— Signature: .

Signature: .
Occupation: .
Address: .

I [We], , of , do hereby accept the above Consols, and apply for the transfer thereof to me [us].

Signature: .

Witnessed by—

Signature: , .

Application for Consols Certificate.

Place: .

Date: , 19 .

To the Registrar of Inscribed Consols,
Treasury, Wellington.

I [We], , of , being the holder of New Zealand Inscribed Consols to the amount of pounds shillings and pence, do hereby make application for a Consols certificate in favour of bearer for the sum of pounds, to be issued to me [us] in accordance with and subject to the provisions contained in "The New Zealand Consols Act, 1894." The prescribed fee of is enclosed herewith.

Witness— Signature: .

Signature:
Occupation
Address:

Consols Certificate.

No. . £ .

THE bearer of this certificate will be entitled to payment of the sum of pounds sterling upon presentation hereof at the Treasury at Wellington, New Zealand, on the day of , 19 , together with such interest, computed at the rate of sterling per centum per annum, as may be found to be unpaid on the before-mentioned date in accordance with the indorsements of interest-payments made hereon.

The principal and interest are a charge upon and shall be paid out of the accruing income of the Consolidated Fund of the colony.

Interest hereon at the rate of sterling per centum per annum is payable half-yearly, on the and in each year, at any post-office money-order office within the colony.

The amount of interest paid is to be indorsed on the back hereof by the person making such payment.

Dated at the office of the Registrar of Inscribed Consols, Wellington, , 19 .

, Registrar.

Countersigned—

, Controller and Auditor-General.

Entered, folio .

[On the back, indorsements of the half-yearly dividends paid by the Postmaster are to be duly made.]

Dividend Warrant.

To the Treasury at Wellington, or to the Postmaster at any post-office money-order office throughout the colony.

PLEASE pay or order the sum of pounds shillings and pence, being interest for half-year due , 19 , on £ -per-cent. New Zealand Consols.

£ : : . , Registrar.

I hereby acknowledge to have received the above-mentioned sum in full payment of interest for half-year due as above.

Signature: .

SECTION II.

AGRICULTURE IN NEW ZEALAND.

[By M. Murphy, F.L.S.]

It is generally admitted that there is no part of the British dominions where agriculture, in its widest sense, can be carried on with so much certainty and with such good results as in New Zealand. The range of latitude, extending as it does from 34° to 47° South, secures for the colony a diversity of climate which renders it suitable for all the products of subtropical and temperate zones, while an insular position protects it from the continuous and parching droughts which periodically inflict such terrible losses on the agriculturist and pastoralist of Australia and South America.

Again, the climate, although somewhat variable, never reaches the extremes of heat or cold. So genial, indeed, is it that most animals and plants, when first introduced to the colony, assume a vigour unknown to them before.

North Island.

All the best forage-plants and grasses thrive most admirably, continuing to grow throughout the year with little intermission. Stock of every sort thrive and fatten rapidly on the pastures, coming to maturity at an early age without the aid of roots or condimental foods. All cereals flourish equally well, more especially Indian corn, which produces from fifty to eighty bushels per acre.

So full is the soil of plant-food that several continuous crops of potatoes or cereals may be taken with little apparent exhaustion. Wheat, oats, and barley thrive where the soil is not too rich; otherwise they produce enormous crops of straw, without a corresponding yield of corn. The tobacco-plant thrives well, as do also hops and sorghum, broom-corn, peanut, hemp, ramee or rhea (China grass), together with a large variety of economic plants, the growth of which will one day afford employment for a large population. In addition to these, all the British, Chinese, and Japanese fruits, with oranges, lemons, limes, olives, and vines (in the northern part), flourish abundantly, requiring but ordinary care. Potatoes are largely grown, and yield heavy crops.

Much of the country along the south-west and west coast is now taken up, and the primeval forest is fast disappearing before the settler's axe. For the most part, the soil is fertile, and the growth of grass and clover is extremely rapid and vigorous when sown on the surface after the felled timber has been destroyed by fire.

To the British husbandman it will seem almost incredible that the best pasture-grasses grow and thrive as they do with no other preparation than the ashes resulting from the burnt timber—no ploughing and no previous loosening of the soil—yet, in less than a year from the date of scattering the seed, this same land will fatten from five to six sheep per acre.

So rapidly are these fertile forest-lands being cleared and converted into pastures that the demand for stock (principally dairy) has greatly increased, and this demand must continue for a series of years before it is fully met.

Those who in the past have watched the progress of New Zealand, especially of the North Island, have always maintained that when the Maori difficulties and other impediments to settlement were over, the prosperity of the country would advance at a very rapid rate. The time has now come, and all that is required to expedite the coming prosperity is the settlement of our lands by a thrifty class of settlers.

There are millions of acres yet unoccupied, a great portion of which is of good quality, and only waiting the hand of man to make it carry, with very little cost, large herds of dairy stock, with flocks of long-wool and crossbred sheep. The west coast of the island is essentially a cattle-country. Considerable areas in the midland districts are adapted to long-wool sheep, as is also the country along the east coast. Much of the country may be described as being good sheep-land, a large portion of which is quite capable of carrying two sheep to the acre, and some of it as many as three or four.

Middle Island.

If the North Island has a splendid inheritance in her forests, the Middle Island can boast of her magnificent plain-lands, rolling downs, and vast mountain ranges, all of which, to a greater or less degree, have already been made to contribute to the wealth of the colony.

The central portion of the Middle Island presented to the first-comers a vast plain, covered only with waving tussock-grass, offering little or no obstruction to the plough.

Travelling south, the country assumes a different character: easy, undulating downs, well watered, here and there interspersed with fertile plains, the greater portion admirably adapted for agriculture, and all of it suitable for pastoral purposes.

The climate of the Middle Island is not so warm in summer nor so mild in winter as that experienced in the North Island. However, as has already been stated, there are no extremes of heat or cold. Much more might be said in praise of this portion of the colony. It is deemed necessary to say so much in order that readers may better comprehend the comparative ease with which every kind of farming is carried on in New Zealand as compared with other countries less favourably situated.

Agricultural Statistics.

The following *resumé* of the statistics, as published in the *Gazette* for the past season, is sufficient to indicate the trend of the agricultural and pastoral industries; fuller particulars will be found in the statistical portion of this book. It will be seen that there has been a material increase in the areas devoted to cereal crops and grasses throughout the colony.

The increase in cereals is as follows: Wheat, 30,893 acres; oats, 77,735 acres; barley, 1,407 acres. There is, however, a decrease in maize of 465 acres. The land laid down in pasture increased by 188,037 acres, but in turnips there were 5,678 acres less.

The stock statistics show that horses have increased by 7,341 head, and cattle by 98,879. Pigs have decreased, the probable explanation of this being that the demand for dairy stock has been so increasingly large that the greater portion of the separated milk from the factories has been used for rearing calves.

The sheep returns for 1902 afford convincing evidence of the phenomenal productiveness of our flocks; for, notwithstanding the enormous drain upon these, to sustain the ever-increasing demand of the frozen-meat trade, it will be found that the increase over the previous returns was 109,628, the total number being 20,342,727, the highest total yet reached by the colony. But the figures for March, 1903, will show reduction on account of large requirements of live sheep for replenishing Australian flocks after losses by drought, and also for South Africa, besides a greatly increased export of frozen carcases. And later, losses by snowstorm will affect the figures.

The Farming Outlook.

Before the advent of the freezing-chamber, sheep-farming could only be carried on profitably on large areas, with large flocks, for the reason that wool and tallow were the only marketable products, the sale of fat sheep and lambs being confined to supplying the demand for local consumption. The new order has completely altered the condition of things from an agricultural point of view. Almost every farmer, small and large, now keeps his flock of breeding-ewes for the production of lambs for freezing, thereby necessitating the growth of root and forage crops, and so bringing about a greatly improved style of farming throughout the colony when compared with the previous system of universal corn-growing.

The season of 1902–3 was remarkable for the lowness of temperature which for the most part prevailed throughout the colony during the summer months, notwithstanding which the cereal crops may fairly be described as phenomenal. Feed has been plentiful. The dairy industry has had a most successful season. The capacity of the frozen-meat works has been taxed to the utmost. New Zealand may well claim the premier position amongst British colonies as a field for agricultural settlement on small holdings. It is true

that land is more plentiful and cheaper in Canada and South America; nevertheless, the favourable conditions upon which agricultural land may now be obtained under the land regulations more than compensate for the cheaper land in other countries, when we consider our immunity from droughts, together with our usually abundant rainfall and ever-verdant pastures. Referring to the season of 1902–3 "Ovis" writes,—

We have had a bountiful harvest, and yet, in view of the light stocks of old wheat at the end of the year, it is doubtful whether the wheat-crop will be much more than sufficient for our own wants. Any surplus that we have will not go very far towards making up the deficiency in Australia. The wheat-crop of New Zealand does not bulk up very largely in the world's annual production of that cereal. The largest crop we have ever grown would not amount to more than about ½ per cent. of the estimated total wheat-crop of the world. We are in the fortunate position of not being compelled to grow wheat on land of inferior quality. In general it is only the most fertile land that is sown to wheat, and this largely accounts for our high average yields. As things have turned out, there are, no doubt, many farmers who regret not having sown a larger breadth of wheat, but the fact of the wheat-crop being kept within such relatively narrow limits is sufficient proof that it has not in the past been found, on an average, a highly profitable crop, and it shows also that there are other branches of agricultural industry which have been found profitable. The special market which existed for oats during the two or three seasons past has led to considerable expansion in the growth of that crop, but indications at present seem to point in the direction of a glutted market. The oat-crop is one that is easily grown: it does not require such good land as wheat, nor does the land need the same special preparation, and it works in very conveniently with other farming operations. There is a large extent of grass which must be annually renewed, and there is a saving of tillage in laying the land down with a crop of oats. The oat-crop is an indispensable part of the economy of the farm, and its value is not wholly dependent on the selling price. It would appear from the statistics of the past two or three years, deducting the quantity actually exported from the quantity estimated to have been grown, that the present annual consumption of oats within the colony is something like 10,000,000 bushels when the price is at a figure which renders it unlikely that any considerable quantity of oats would be used for feeding sheep. When the price goes very low, when, as sometimes occurs, oats are at a price which leaves little or no margin of profit, then the home consumption goes up largely. This is especially the case when there happens to be a shortage of other feed. During the past two or three seasons the sheep-feeding boxes have been practically thrown aside, but next winter they will probably come into use again, and a not inconsiderable part of the oat-crop will find its way to the market in the shape of mutton and wool, and also dairy-produce. A country owning 20,000,000 sheep, 1,400,000 cattle (including nearly 400,000 dairy cows), and 300,000 horses, should, with mutton and dairy-produce at fairly good prices, have no difficulty in putting a few million bushels of oats to profitable use. As a matter of fact, farmers are quite willing to starve both their sheep and cattle in order to make an immediate profit on the oat-crop, but when the price of oats goes below paying-level, the stock begin to profit by it, and the farmer is not so badly off as he takes himself to be. There is the further consideration that grain sold in the bag is fertility parted with, but grain fed to the stock is in a large measure fertility conserved.

The unusual lateness of the harvest has had the effect of hampering sheep operations this season. The stubbles are full of undergrowth, but the crops were so long in ripening that, except in very early districts, feed of this description was not available for weaning purposes at the proper time. This, for a while, had considerable influence on the lamb market, but from this time forward there is every prospect of abundance of feed all over the country. The export of fat lambs this season will probably be exceptionally heavy. Last autumn it was the

general outcry that the lambs were not doing well, and yet, in comparison with the previous year, there was an increase in the export of lambs of about 400,000 carcases. But it is a question whether there was not some falling-off in quality. The average price on the Smithfield Market for New Zealand lamb for the year is given at 5d. per pound, which seems to show that the lamb trade must have been profitable to the country generally. It is to be remarked, however, that the import of River Plate lamb to the London market last year showed the substantial increase of over 100,000 carcases, though the quantity is still insignificant in comparison with the number received from New Zealand. Australia, notwithstanding the drought, was able to increase its output of fat lambs by upwards of a quarter of a million, a fact which seems rather surprising, though its decrease in mutton export was more than 600,000. There seems little likelihood of Australia ever becoming a serious competitor in the lamb market, though the sudden increase of the River Plate lamb trade may be an earnest of much larger numbers to follow. But it is not to be taken for granted that we are going to be driven out of the London market by the South American product. The New Zealand lamb trade has been a profitable one for years past, a fact which has, doubtless, not been overlooked by South American producers and exporters, and had there not been great natural difficulties in the way of fattening lambs in that country the South American lamb trade would long before now have assumed much greater dimensions. It is a fact well within the experience of New Zealand sheep-farmers that fattening lambs and fattening mature sheep are two different things. It is uphill work fattening lambs in districts where the climate, soil, and other conditions are such that they do not fatten well naturally, and it is also an undertaking of considerable relative expense. New Zealand has many advantages from a pastoral point of view, and yet the area which may be described as good lamb-fattening country is very limited. It may be remarked that last year the heaviest shipments of Australian lamb came on the London market during the first two months of the year, a time at which importations from this colony are exceptionally light. Unfortunately, New Zealand shipments come on the market in very irregular quantities, and the price fluctuates in accordance with the arrivals. In connection with this aspect of what is one of our most important industries, and which, with more judicious handling, might become still more valuable, the remarks of Mr. Gilbert Anderson at the annual meeting of the Christchurch Meat Company are well worth repeating: "The table of shipments shows the erratic manner in which the shipments are made, and how difficult it is for either the freezing companies or the shipping companies, or those who have to meet the daily supply in London, to cater for a business carried on in this erratic manner. Some day, no doubt, the farmers will be satisfied to leave the entire shipping in the hands of the freezing companies, so that regular supplies can be sent forward as the market requires them."

Wheat.

The Canterbury Plains, the great wheat-growing district of the Middle Island, extend 150 miles north and south, running inland from the sea for forty miles, the whole forming an area of over 3,000,000 acres. A great portion of this vast plain is admirably adapted for the production of wheat, barley, and oats, and all the best cultivated grasses, the growing of which has been carried on extensively since the foundation of the colony. The total area under wheat for threshing in the colony for the season 1902–1903 was 194,355 acres (exclusive of 389 acres cut for chaff and 496 acres fed off with stock), of which 135,907 acres were grown in Canterbury, the average yield throughout the colony being 38·37 bushels per acre. The land is for the most part free from stones or impediments of any kind. Single-furrow ploughs are now rarely seen,

double- and three-furrow ploughs being in general use, and an occasional steam plough. Three horses, occasionally four, with a man or a boy, can turn over three acres per day on the plains, at a cost of 5s. or 6s. per acre. A stroke of the disc or other harrow, followed by the seed-drill and light harrows, completes the operation of sowing.

Seed-sowing commences in May, and can be continued as weather permits through the winter, and in the heavy swamp-land (drained) on into September and even October. From 1¼ to 1½ and 2 bushels of seed per acre are usually sown, the quantity increasing as the season advances.

Oats and Barley.

Otago and Southland districts excel in the production of oats, which is their principal cereal crop. The total area sown for grain under this cereal for the season 1902–1903 was 483,659 acres, being an increase as compared with the previous season of 77,735 acres.

The yield of oats in Otago and Southland varies from 40 to 80 bushels per acre, the cost of production being about the same as wheat—viz., £2 per acre when grown from grass-land, and £1 10s. from stubble.

Malting barley, of very superior quality, is grown in Nelson and Marlborough, where the soil and climate appear to be particularly adapted to its culture.

The growing of this cereal (barley) for malting purposes requires more attention than it has yet received in this colony. It is claimed for this crop that it will show a better result than wheat, for the following reasons: (1) It is less exhaustive to the soil; (2) it gives an average yield of from 10 per cent. to 20 per cent. more than wheat; (3) the growing crop in favourable seasons can be fed off twice, or even three times, to the advantage of the subsequent yield of grain. Land of a light and calcareous nature, but unsuitable for wheat, will give a barley thin in the skin, and particularly suited for malting purposes. Barley is not a difficult crop to raise, but there are certain points that need careful attention, which, if neglected, would probably result in the production of an inferior sample, which would hardly pay for growing.

Root-crops.

Potatoes: Potatoes are largely grown throughout New Zealand. On suitable soils very heavy crops are raised, it being no uncommon thing to dig from 8 to 10 and 15 tons per acre, although the general average is much lower, for the reason that unsuitable land is frequently devoted to this crop. The area under potatoes in 1902–1903 was 31,408 acres, as against 31,259 acres grown in 1902. The bulk of the crop is planted without manure, but, where used, bonedust, superphosphate, blood-manure, or animal guano (which may be procured of first quality from the local manure manufactories), from 1 cwt. to 2 cwt. per acre, is applied with good results.

The potato is, however, an expensive crop to grow, costing from £5 to £6 per acre, and it is perhaps the most precarious of all crops, being materially affected by drought, but more particularly so by early and late frosts. The crop in Canterbury for the past season, 1903, was damaged by a frost in April to the extent of one-fourth of the expected yield. Potato growers admit that £1 10s. per ton off the fork will pay better than £2 after being stored for any time.

Land for potatoes is usually broken out of grass, skim-ploughed in autumn, ploughed deeply in spring, and thoroughly tilled; or potatoes may be grown in drills opened and closed with a double-furrow plough. The seed—15 cwt. per acre—is then ploughed in under every third furrow, the after-culture consisting of harrowing just as the crop is appearing over ground (by this means myriads of seedling weeds are destroyed); drill-grubbing, hoeing, horse-hoeing, and earthing-up being the subsequent operations. Heavy crops of wheat, oats, barley, beans, or peas can always be relied upon after potatoes, season permitting.

*Turnips:** The turnip crop of this season has been an indifferent one. On the plains of Canterbury the want of sufficient warmth and moisture at the critical period of turnip growth had an injurious effect on thousands of acres. In the southern portion of the Island the crop will be sufficient for the requirements of stock-owners. The area under this crop for the season 1902–1903 was 392,830 acres.

Rape is largely grown as sheep-feed, and may be sown either in early spring or immediately after harvest, the stubble being skim-ploughed or broken up with the spring-tined cultivator. This crop is invaluable in the early spring, and may be fed-off in time for oats or barley. Dairy-cattle, however, should not be fed on rape, as doing so destroys the flavour of the milk. This fodder plant ranks next in value to the turnip for fattening sheep and lambs, and forms a most valuable adjunct to that crop.

Mangolds and Carrots are largely grown in some districts. They cost more money per acre than turnips to produce, as they must be hand-hoed; nor are they so suitable a crop for cleaning the land. Turnip-sowing does not commence till November or December, affording ample time for the destruction of seedling weeds; this important opportunity is largely lost in the culture of the mangold, which is usually sown in October. Mangolds are, however, an invaluable crop on a stock-farm, as they do not reach their primest condition until the turnip-supply is exhausted, usually in August. From 30 to 60 tons per acre is not an uncommon yield of these roots, often without the aid of manure, on rich swamp land.

Carrots are also a valuable crop, especially for horses; on sandy loams the yield reaches 15 to 20 tons per acre. Carrots impart a pleasant flavour to butter, and should be largely grown for dairy stock.

* Valuable information on the growing of this crop will be found under this heading in the Year-book for 1901, page 478.

Seeds.

Clover: Saving clover for seed in favourable seasons is a lucrative industry, adding materially to the farmers' income. Clover is sown with a spring crop, usually of corn, lightly grazed in the following autumn, and then reserved for a crop of hay, which, according to the season, yields from 2 to 3 tons per acre when cut in November or early in December. Most farmers prefer feeding off with sheep in preference to mowing for hay. The after-growth is then allowed to flower and seed, which it does very freely. Thousands of humble-bees may be seen in the clover-fields during the months of January, February, and March. The seed ripens in March, and is then cut and dried, and threshed out by machines known as clover-shellers. An acre of clover may yield in hay and seed from £8 to £10. It must, however, be stated that, while a good crop of clover-seed is a most lucrative one, it is nevertheless a most precarious one. Owing to the lateness of the season of ripening, it sometimes happens that the fertilisation is imperfect, resulting in a majority of barren heads. This has given rise to a controversy as to whether the proper bee has been introduced. The point was referred to the late Miss Ormerod, the English entomologist, who settled the question in the affirmative.

White and alsike clover are now grown in considerable quantities. White clover yields enormously: as much as 300 lb. of alsike seed has been obtained per acre. These clovers are not so dependent on the action of the humble-bee for their fertilisation. They mature earlier, and are more easily threshed and cleaned than cow-grass or clover.

Grass-seed Saving: All the most valuable British grasses flourish throughout New Zealand. Cocksfoot has been for many years a staple product of Banks Peninsula (Akaroa County), where the soil for the most part consists of decomposed volcanic rocks and vegetable mould. Large quantities of this seed are now raised in the North Island and in many other parts of the colony as well. The seed is of the finest description, frequently weighing 20 lb. to the bushel, 12 lb. being a standard bushel. Cocksfoot thrives on a very wide range of soil, from the richest to the poorest, preferring, of course, the former. It may be found on the dry stony plains of the interior, green and healthy, when the surrounding herbage, introduced or indigenous, has given in to the heat of the summer sun.

Growing ryegrass for seed is also an important industry. The seed is usually gathered by stripping; sometimes the grass is cut and tied and afterwards threshed by machinery. The average yield is from 15 to 20 bushels per acre, weighing from 25 lb. to 32 lb. per bushel, 20 lb. being the standard weight. A common practice is to graze the land till midsummer; to take the stock off for a few weeks, and then to run the stripper over the ground. By this

primitive method 10 bushels per acre are sometimes secured, being of the finest quality. Ryegrass-seed is usually in good demand; the price varies according to the season; the usual price, however, is from 2s. 6d. to 3s. 6d. and 4s. per bushel.

Many of the indigenous grasses of New Zealand are possessed of considerable feeding value, but, unfortunately, few of them will stand too close feeding. The action of fire is especially injurious to most of them. Of recent years a great deal is being written about *Danthonia semiannularis* (one of the native oat-grasses) as a grass particularly adapted to some of the poorer soils in the North Island, where it is said to thrive admirably; it is also said to be able to resist the action of occasional grass-fires. There are many varieties of Danthonias, from the giant, coarse-growing snow-grass or oat-grass, to the fine-leaved varieties found in almost all the natural permanent pastures.

Small Seeds: New Zealand, from the nature of her soil and climate, offers a fine field for growing all kinds of farm and garden seeds. This circumstance has already attracted the attention of some of the larger seed-merchants of Great Britain, whose agents occasionally visit the colony with a view to inducing farmers and others to grow certain kinds of seeds. The industry is peculiarly adapted to small holdings, and well suited to young persons, the work being light and of an interesting character. Ready sale can be found for carefully-grown and carefully-cleaned garden seeds.

Other Crops.

Pulse: Peas and beans are largely grown for pig and horse feed, and for export; they form an excellent preparation for wheat. An extensive trade in peas of a certain description is done in the manufacturing towns of Great Britain; and efforts are now being made to secure a share of this trade for the colony by producing peas suitable for splitting for human food. The business should prove a most remunerative one. Thirty bushels of peas per acre are considered a fair crop, while 40 to 70 bushels of beans are often secured. As showing the extraordinary fertility of some of the lands in the Canterbury District, it may be mentioned that beans and wheat have been grown alternately on Kaiapoi Island for thirty years without any apparent diminution of yield, the crops of recent years being as abundant as those grown years ago; 40 to 50 bushels of wheat and 60 to 70 bushels of beans being the usual return per acre.

Cape Barley and Winter Oats: The demand for early spring feed has resulted in the growing of these plants for forage. Their extreme hardiness renders them well adapted for autumn sowing. If sown in March they are ready for feeding-off in May; they may be fed off again in July, and on till the beginning of October, when, if allowed to run to seed, they will produce 40 to 60 bushels per acre, or they may be ploughed in for turnips.

Tares are also grown, but not so largely as they deserve to be, especially for dairy stock. Mixed with oats, barley, or rye, they are excellent milk-producers; and when grown luxuriantly they destroy all kinds of weeds, and leave the land in fine condition for a spring corn-crop.

Lucerne: This permanent fodder-plant thrives admirably in most parts of New Zealand, yielding three to five cuttings in the year; and, if properly cultivated and well attended to, particularly in its early stage of growth, it will continue to yield liberal cuttings for seven or eight years, or even longer. This is a most excellent crop for the small or large farmer, furnishing, as it does, an abundant supply of succulent fodder, in deeply-cultivated soils, during the drier months of midsummer, as well as in the early spring. All farm animals are partial to lucerne; pigs thrive admirably upon it. No farm should be without a well cultivated plot of this plant. In deeply-cultivated land lucerne will yield several cuttings during the season, no matter how hot and dry the weather may be. It is this drought-resisting quality which renders lucerne such a valuable fodder plant in Queensland and New South Wales, where it is extensively grown for pasture purposes.

Cost of Working a Farm in New Zealand.

When comparing the cost of working a farm in England with one of the same size in the colony, several points have to be taken into account, such as the climate, the soil, labour, and machinery. In Australasia wages are higher than in Britain; as a set-off against this, New Zealand can claim, firstly, that there are more fine working days in the year, that the fields are much larger, that the latest improvements in machinery have been introduced, that the soil is more easily worked, and that the genial nature of the climate renders it unnecessary to house stock during the winter months, at least in the North Island, thus saving the cost of attendance; secondly, that farming operations may be carried on continuously throughout the ploughing and sowing season; and, thirdly, that the paddocks are so large, and usually so level, that the double- and treble-furrow plough may be worked by one man or youth with three horses, thus equalising the cost of labour, as we have shown that one man, or even a boy, will be quite equal to two men or boys in the Old Country, so that after all the difference in the rate of wages is not so great as might appear at first sight.

The hay-crop is simply cut one day, raked into windrows the next, and in a couple more it is ready for stacking.

Wheat is cut and tied by machinery, the stooks requiring no capping. It is frequently threshed out of the stook in favourable seasons, thereby saving the cost of stacking and thatching; but this method, although very general, is not recommended except in hot or dry seasons. When stacked, the stacks are rarely thatched, except, perhaps, on the weather side. This is a wise precaution, the neglect of which sometimes entails serious loss.

The manure bill, which is such a heavy item of annual expenditure with the British farmer, presses as yet very lightly on the farmers' of the colony. It is, however, a notable fact that the use of fertilisers is becoming more general; 1 cwt. to 1½ cwt. of superphosphates per acre is used with the turnip and other root-crops, for the purpose of forcing the young plant into the rough leaf, when it will be out of one danger—the turnip-fly. It will therefore be seen that the colonial farmer has many advantages over the farmer of the Old Country.

It may also be pointed out that the application of one or two hundredweight per acre of superphosphate of lime produces better results in colonial soils than double the quantity would do in England, showing clearly that the natural richness of colonial soils is not yet exhausted.

Live Stock.

Cattle: The total number of cattle in the colony for 1902–1903 was 1,460,663, an increase of 98,879 over the previous year.

Horses: The number of horses in the colony for 1902–1903 was 287,419.

Sheep: The returns made up to the 30th April, 1903, show a falling off of 1,340,678. It must not, however, be assumed that this shortage arises from any diminution in the power of production in the colony in this direction; but rather to the continually increasing export of maiden ewe lambs, regardless of the requirements for the up-keeping of the breeding flocks of the colony. As will be seen by the following figures, the export of lambs for the year ended 31st March, 1903, amounted to 2,104,544, as against 1,684,091 in 1902, or an increased output of 420,453. The export of mutton shows a large increase as well—viz., 866,371 carcases, or a total increase for the year of mutton and lamb of 1,286,824. The total exports for the year ending 31st March amounted to 2,531,993 sheep and 2,104,544 lambs, a total of 4,636,537, as against 3,349,713 in 1902. Again, the number of live sheep exported in 1901–1902 was only 3,579, as compared with 48,447 in 1902–1903. In addition to these causes it must be remembered that the lambing in certain districts was most unsatisfactory. It will therefore be seen that the shortage of sheep is principally due to the indiscriminate slaughter for the freezing-works, induced by the extremely remunerative prices offered for sheep and lambs suitable for the purpose.

The returns made up to the 30th April, 1903, show the distribution of the flocks of the colony to be as follows: In the North Island, 9,512,527; and in the South Island, 9,489,522: total, 19,002,049.

Sheep.

Sheep: New Zealand has proved itself admirably adapted for the breeding of all classes of sheep, from the fine-combing merino to the strongest type of Lincoln. The merino occupies and thrives

on the wild lands of the colony, from the snow-line to the border of the plains, as well as on the drier portions of the plains. The merino ewe furnishes the foundation for all the crossbred varieties. On the rich moist soils the Lincoln and Romney Marsh sheep flourish, while the finer English and Border Leicesters and Downs sheep occupy the drier lands.

Crossbred Sheep: Those bred from merino ewes and longwool rams, or from crossbred ewes with Down rams, are the most suitable for the frozen-meat trade, and are known as "freezers."

The dapper little Southdown flourishes wherever crossbreds thrive. Their more ponderous cousins, the Shropshire and Hampshire Downs, have their admirers, especially the Shropshire, which are largely used for crossing, with a view to producing early-maturing lambs. English Leicesters are also much sought after for this purpose, particularly in the Middle Island, where "prime Canterbury" mutton is produced.

Shearing commences in September, and is continued till January. The usual price per hundred is from 17s. 6d. to 20s. Shearing-machines are not so largely used as was expected when first introduced.

The average clips for the various breeds of sheep are approximately: Merino, from 4 lb. to 7 lb.; quarter-breds, about 6½ lb.; half-breds, 7½ lb.; three-quarter-breds, 8½ lb.; Leicester, 10½ lb.; Lincoln, 11 lb. Of course, very much larger clips are obtained from special flocks, as much as 25 lb. to 30 lb. per sheep; but the above figures represent general averages.

The staple of New Zealand wool, especially the long-wool and cross-bred, is remarkable for its freedom from breaks and other imperfections incidental to countries subject to long droughts and scarcity of feed.

The most profitable sheep for New Zealand is that which combines the best fleece and the most suitable carcase for freezing purposes, together with early maturity. This is the class of sheep which some sheep-breeders have set themselves to produce. Whether such an animal, having fixity of type, can be evolved, remains to be proved; so much depends on the feed, situation, and soil.

The capability of New Zealand for producing mutton has not yet reached its limit. When the frozen-meat trade was first seriously considered, an assertion to the effect that the colony could soon find 1,000,000 sheep per annum for freezing without impairing the breeding-flocks was treated as highly chimerical by sheep-breeders of long experience. The annual output of sheep and lambs is now over four millions and a half. But, while congratulating the colony on the rapid development of the frozen-meat trade, it must be borne in mind that in Argentina strenuous efforts are being made to secure a share of the frozen-mutton trade carried on by New Zealand with Great Britain; Australia is also striving hard to share the trade with New Zealand. It must be admitted that with cheaper land, and a closer proximity to the markets

of the world, Argentina will necessarily be a very formidable rival to Australasia. The only way to keep command of the market is to ship nothing but first quality graded mutton and lamb.

"The New Zealand Flock-book," published in 1895, is now thoroughly established, and is of great value to the owners of pure pedigree flocks. The Royal Agricultural Society of Victoria also publishes a Flock-book for British breeds of sheep. This is a step in the right direction, as flock-masters in South America demand a certificate to the effect that the cattle and sheep purchased by them are duly registered in an authorised Herd- or Flock-book. The value of these books is now so fully recognised that all the distinctive breeds of sheep in Britain and elsewhere have their recognised registers.

Horse-breeding.

The climate of New Zealand is admirably adapted for the breeding and rearing of horses of all kinds, especially draught-horses. Indeed it would be difficult to find better Clydesdale horses than those bred on the limestone soils of Oamaru and elsewhere. Some of the best blue-blood of this breed has from time to time been imported from Scotland, with the result that the breed is now well established in the colony.

The light-horse stock of the colony has risen into note through the production of animals which have rendered themselves famous on the colonial turf. The demand for horses suitable for remounts for the cavalry service in India is a continuous one, affording a ready market for the proper stamp of animal; shipments are periodically made to that country with varying results.

With a view to bringing the use of pure-bred sires within the reach of small selectors in the outlying blocks the Government have imported a few first-class horses of the most approved types, which cannot fail to have a beneficial effect on the stock of the country. The Canterbury Agricultural and Pastoral Association publish a Draught-horse Stud-book, which is largely used by breeders of that class of horse.

Cattle.

The colony possesses all the best strains of blood, and this is evidenced by the superior class of cattle to be met with throughout the settled districts, especially in the show yards. There are now four herd-books published in the colony—viz., the "Shorthorn," "Other Breeds," published by the Canterbury Agricultural and Pastoral Association, the "Hereford Herd-book," published by the Hereford breeders, and the "Jersey Herd-book," published in Palmerston North. The value of properly kept herd-books is now fully recognised. Purchasers of animals for export or otherwise now demand that they shall be duly registered in some authorised Herd-book as a guarantee of pure breed. New Zealand is free from many of the diseases so disastrous to horned stock in other countries. It is said that Iceland is the only other spot on the

earth which enjoys a similar immunity. With a view to maintaining this enviable position, the Government have prohibited vessels carrying live-stock from infected colonies touching at any of the ports of New Zealand except under certain conditions. This action is deemed necessary, owing to the prevalence of pleuro-pneumonia in Australia.

Dairy Stock.

The breeding of first-class dairy stock offers a field for profitable investment. Milking-cattle now command a high price, and will continue to do so, owing to the increasing development of the dairy industry. There are now 428,773 cows kept exclusively for dairy purposes. The rearing of well-bred heifer calves will repay all the time and trouble bestowed thereon. Separated milk, although relieved of its butter-fat, loses little of its feeding value; the addition of a little linseed meal will restore the fatty constituents, which, however, are not the most valuable for feeding purposes. Ground oats, wheat, or barley added to the linseed mucilage will render calves fit for the butcher in a comparatively short time. An acre or so of European flax should be grown upon every farm where stock-rearing is carried on. The fattening of calves for export has not yet been attempted in the colony, although there is a very large and lucrative market for veal calves in London, ranging from £4 to £6 and £7 per head. Much has still to be done in the way of improving the dairy stock of the colony. The yield of milk from fairly good milking-cattle is approximately 500 gal. per annum, although 700 gal. per head are frequently obtained from selected herds. The average quantity of milk obtained will no doubt be increased as more attention is paid to breeding, and proper feeding. The general management and feeding of dairy stock is a question demanding every attention. Kind treatment is essential to success; clean pastures, clear running water, and grasses of the best quality are all factors fully recognised wherever dairying is successfully carried out; and, last but not least, warmth and shelter during the cold wet months of winter.

The average yield of butter from milk passed through the separator is 1 lb. for every 2½ gal. of milk of 10½ lb.; so that the average cow produces annually 200 lb. of butter, or 500 lb. of cheese, which, estimated at 4½d. per pound, will be worth about as much as the butter.

The Dairy Industry.

This industry continues to flourish throughout New Zealand. The export of butter for the year ended 31st March, 1903, reached 263,196 cwt., valued at £1,268,759; and of cheese, 74,611 cwt., value £181,604: or a total of £1,450,363. This industry is capable of much greater expansion without even increasing the number of milch cattle, but by improvement in breeding. The Government continues to spend large sums of money in teaching the art of

butter-making, the proper method of packing, and shipping. Till recently nothing was done in the way of encouraging the breeding of better strains of cattle for the production of milk of superior quality as well as quantity. The Government, recognising the importance of this matter, have imported a few first-class sires for the use of those dairy farmers who are not in a position to secure the best bulls for their purpose. The service of these bulls has been fixed at a nominal scale, and is only available for selected animals. It will thus be seen that dairy farming has now developed into one of the settled industries of the colony. Graders are employed examining all butter and cheese for export, who brand each packet with its proper quality. Factory-owners now recognise the fact that it is folly to pay freight on any but the best quality; and this remark applies to grain and meat as well. We have to compete against Canada, the United States, Denmark, Australia, and the Argentine. New Zealand dairymen must, therefore, endeavour to raise dairy cattle which will yield the maximum of milk of the best quality; in fact, nothing but intense farming will pay in the future, applied to every branch.

It is interesting and instructive to note the progress of our dairy industry—judging from the exports of butter and cheese for the year ending March, 1903—viz., butter, 13,160 tons; cheese, 3,730 tons: showing an increase in butter of 2,185 tons. Cheese, however, shows a decrease of 593 tons. This falling-off, however, is accounted for by the fact that several factories have been closed and turned into creameries in connection with butter factories, and for the supply of milk for condensing. Compared with the frozen-meat industry it is also interesting to note that the total value of the dairy produce exported for the past year amounted to £1,450,363, as against £1,173,216 for the year ended 31st March, 1902. The total value of the dairy produce exported in 1895 amounted to only £378,570. The value of the frozen meat for the same period was £1,262,711. It is therefore very probable that the former industry will equal—if it does not excel—the latter in value in a very few years.

Side by side with this rapidly developing industry, we have to bear in mind the fact that the Argentina is also increasing its export of butter and meat to the British market. Statistics show that while in 1900 her export of butter was only 102 tons, in 1902 it had increased to 3,018 tons, 562 tons of which was sent to South Africa.

The complete sterilising of milk to destroy the germs of diseases like tuberculosis is a wise precaution. The operation consists of heating milk up to a certain temperature, and cooling it rapidly, a process which has been found to destroy the bacillus of tuberculosis known to be present in the milk of affected cattle. The Government veterinaries are employed examining the cattle, and a large number are annually tested with tuberculin, and when found affected they are destroyed, compensation being allowed.

Pigs.

These useful adjuncts to the dairy should hold a much more important position on all dairy farms in New Zealand than they do at present. The last statistics show that there has been a considerable falling-off in numbers. The favourite breed in New Zealand is the improved Berkshire. The large and small breeds of White Yorkshire are also to be met with, but are not so generally approved of as the black pigs. The Tamworth pig has its admirers amongst pig-breeders, as they answer admirably for crossing with black pigs. They produce good bacon pigs, making more lean meat and longer sides than the pure Berkshires. Pigs require no better attention than a good grass paddock, with a liberal supply of roots, and a little unthreshed pea-haulm for a few weeks before killing, with plenty of water, and shelter from the sun during the warmest summer months.

The breeding, rearing, and fattening of pigs is a source of wealth which is capable of considerable expansion. Several plants for the mild curing of bacon have been set up at the various freezing-factories, and by private persons and firms. The establishment of properly appointed pig-farms is a somewhat costly undertaking, as all the fences must be pig-proof. Doubtless this consideration has had a deterrent effect upon some, while others find the rearing of young stock for the dairy and the breeding of lambs a sufficiently profitable undertaking, besides causing less trouble.

The stock of pigs in the colony is estimated at 193,740. There is room for an enormous extension of this industry.

Poultry.

The efforts being made by the Government to foster this industry are gradually producing the hoped-for results. The distribution of a better class of poultry is showing good results already. Farmers are beginning to see that their poultry-yard should form no mean auxiliary to the general return from the products of the farm. With such a climate as we have, there need be no difficulty in raising hundreds where dozens are now produced. The Department is doing much to foster this industry, with what success may be gathered from the following statement of facts: During the last financial year 75,000 birds were killed, dressed, and graded at the Government depots, the majority of them for the South African market, as against 38,000 for the year ending 31st March, 1902. In addition to the poultry which passed through the depots during the last financial year, several thousand birds were exported without being graded by the Government experts. The Agricultural Department intends to seek legislation to prevent the export of any poultry unless it has been graded by a Government official. This is a step in the right direction.

The Fruit Industry.

From the North Cape to the Bluff Hill, in the extreme south of the Middle Island, the climate and soil are, for the most part, eminently adapted for the growth of a large variety of fruits. Generally speaking, pears, plums, quinces, apricots, figs, walnuts, cherries, gooseberries, currants, strawberries, and raspberries grow luxuriantly, producing abundant crops of fruit. In the Auckland District, oranges, lemons, and limes flourish: many groves are now bearing, and afford light and pleasant employment to a large number of persons. This employment will go on increasing as the plantations throughout the colony become older. The olive flourishes in the North Island, bearing heavy crops, and the manufacture of oil will assume important dimensions at no distant date.

Vine-growing is also carried on with tolerable success in many districts; tons of fruit grown under glass are sold in the Auckland markets annually. Signor Bragato, an Italian wine expert, has given it as his opinion that there are numerous localities in both Islands suited for growing vines for the manufacture of wine.

Away in the far north the banana grows and ripens its fruit, but it is not thought that it will ever enter into successful competition with those grown and imported at so cheap a rate from the Pacific Islands.

Extensive orchards of apples have existed in Auckland for many years, and are still capable of producing an abundance of fruit, if kept free from codlin-moth and other pests. Orchard-planting is progressing, and must one day be a very important industry. Central Otago will also become a large fruit-producing district, being free from violent and scorching north-west winds. The total area under orchards in the colony is 27,191 acres, including 705 acres of vineyard.

The manufacture of cider is already assuming considerable dimensions, opening up a ready market for surplus fruit. The colonial-made article is rapidly coming into favour with the general public.

The drying of fruit has been fostered by the authorities, who sent an expert through some of the apple-growing districts, giving practical lessons in the art of artificial fruit-drying. A great deal more might also be done in bottling fruits, and the manufacture of fruit-wine, if only for home consumption. The manufacture of jam is successfully carried on; there is, however, plenty of room for further developments in this direction.

Prospects of Small Farmers.

Those who have watched the course of events in other countries, so far as they affect the agricultural interests of New Zealand, have come to the conclusion that New Zealand will have to pay great attention to the quality of her agricultural exports. Our farmers cannot hope to compete with such countries as Australia and South America, where land is so much cheaper, and where mutton

and beef of good quality can be produced; for cheap meat these must command the markets of the world. Happily for New Zealand, our climate and pastures are such that we can not only produce mutton equal to the finest English or Scotch, but we can produce more per acre than can be done in Australia. Our dairy-produce is now second to none, which is largely due to the system of manufacture and Government grading.

Owing to her humid climate and fertile soil New Zealand is peculiarly well adapted for small holdings. Men of slender means can easily make homes for themselves and their families, always provided they know something of the work they undertake, and are, with their families, willing to work hard and live frugally for a few years. It is quite possible for a man with a few cows and pigs, together with poultry and bees, to make a good living, as markets for these products are now being opened up in England and elsewhere; there is also a good local market if the goods are properly prepared, and a continuous demand for the supply of coastal and ocean-going steamers. The facilities now given for obtaining land and money at reasonable rates offer great inducements to persons to settle upon the land. This is amply illustrated at Cheviot, where a fine estate has been cut up into moderate-sized farms, and let to farmers on perpetual lease at a rental representing 4 per cent. on the purchase-money. Prosperous homes have sprung up, and tree-planting is being carried on by some of the settlers, which is an earnest of the stability of the settlement.

TIMBER TREES OF THE WORLD.

NOTES ON SOME OF THE CHIEF TIMBER TREES OF THE WORLD, WITH REFERENCE TO THEIR ADAPTABILITY FOR PLANTING IN NEW ZEALAND.

[By T. W. ADAMS, Canterbury.]

ALMOST every country in the world has one or two trees that are very largely relied on for timber-supply, both for home use as well as for export. In New Zealand the kauri and rimu are used much more than any other trees. In Northern Europe the Scotch pine and larch are the mainstay, spruce occupying almost the same position there as white-pine does here. In Greece and Southern Europe *Pinus laricio* supplies large quantities of timber. In the Eastern States of America and Canada, white-pine (*Pinus strobus*) is the chief timber tree, with spruce taking second place. The Southern States of the Union rely on *Pinus australis*, known in the market as Georgia pitch-pine, with *Pinus mitis* taking second place as the soft-leaved pine. In the mining districts of the interior, *Pinus ponderosa* and its varieties is the great lumber tree, while in California and British Columbia several trees grow in sufficient quantity and size to be largely used as sawn timber; but even here two trees stand out

beyond the rest as sources of supply—in California, the redwood *(Sequoia sempervirens)*, and further north the Oregon pine *(Abies douglasii)*, are each converted into sawn timber in enormous quantities, and exported to the ends of the earth. And so I might go on mentioning the spruce of Norway, the stringy-bark gum of Tasmania, the red-gum of Victoria, and the cedar of India; but as all those, and many more species of trees, have been introduced into New Zealand, our chief inquiry will be which of the many trees introduced will be likely to prove the most profitable to plant here. Nothing can be more important than this, for, if useless trees are planted, the loss to the individual and the colony will be enormous. Many grave mistakes in planting have been made, and are still being made. For the early mistakes there are good excuses, but for the blunders that are every year made now no excuse is possible.

For those who take an interest in forestry it is very pleasing to find that the Forest Department of New Zealand is every year increasing the number of trees raised and planted, and it seems hardly possible to conceive that any labour union will complain of the prisoners being employed in planting trees on the poor pumice lands of the interior of the North Island. The possibilities of the pumice lands for growing timber are astonishing. I have been informed that some larch planted last year had made a growth of 3 ft. during the year, and that in a plantation made five years ago larch trees were to be found 25 ft. high. This growth is wonderful, and proves without doubt that the pumice plains, which have always been spoken of as being perfectly useless, will yet become a very valuable asset to the country if planted with suitable trees, and where the larch will grow no better tree can be planted, its good qualities being well known; and it has this advantage, that seeds can be procured from Europe at a low rate, and the plants, when raised, can be removed with the greatest ease and success. Mr Matthews, State Forester, tells me that he has imported 6 cwt. of larch-seed this year, and if, as we are told, there are 68,000 seeds in a pound, it means that there are over four millions of seeds of this one tree alone to be sown in the spring. I suppose not more than fifty per cent. will grow, but even then it means millions of trees to plant out. It is only in the very best places in Canterbury that the larch will grow, and it cannot be recommended for general planting, several other trees promising better results.

For planting on the Canterbury Plains, *Pinus laricio*, *Pinus ponderosa*, and the Austrian pine will be found far more suitable than the larch. Of the other great timber-producing trees of the world the Scotch pine may be dismissed as being of very little value in any part of New Zealand. The same may be said of the Norway spruce, a good specimen being very rare, and even where it will grow other trees of more value should always be planted. Nor does the *Pinus strobus*, the tree so much lauded in the Eastern States of America and Canada as the tree of trees, promise much in New Zealand. Now and again a fairly good specimen

may be seen, but generally they have a very thin and shabby appearance. *Pinus australis* and *Pinus mitis*, valuable trees in the Southern States of America, grow very slowly, and show no promise of being of any value here for their timber; but *Pinus australis* may be grown for its distinct and peculiar appearance. *Sequoia sempervirens*, the redwood of California, will probably be found to be a profitable tree in some parts of New Zealand, especially where the larch succeeds; there I think that the redwood will grow, and where it will grow it is very desirable that it should be largely planted, as it is not only ornamental, but the wood is one of the most useful, and is now imported for certain special purposes, as for window-sashes, proving the most suitable of all woods. The tree is a very rapid grower, but is very subject to lose its leading shoot. There is a very fine specimen standing by the monkey-puzzle in the Public Gardens, Christchurch, which has been seeding freely for many years. The Oregon pine (*Abies douglasii*), also known as *Pseudotsuga douglasii*, is a grand tree, and will succeed over a much wider range of climate than the redwood, as good specimens may be seen in every provincial district of New Zealand.

The opinion seems to be widely held that the indigenous trees cannot be propagated and grown as other trees are, but it is not so, as totara, kauri, and all the other native timber trees can be grown in the nurseries with ease; but it is very doubtful whether a timber-supply could be secured from them so economically as from species that have been introduced from other countries, and yet it is to be hoped that our Chief Forester will make plantations of each of our best timber trees, and give them a trial. As the kauri lives in Christchurch, it might be tried over a much wider range than it now occupies in its native state with good prospect of success, as, for instance, all down the west coast of the North Island. Totara, one of the most durable woods known, can be grown almost everywhere, and as it grows readily from cuttings, and is quite ornamental, it should be seen much oftener than it is. I have succeeded in raising a large number from seed gathered in Nelson District. The rimu is more difficult to grow than either kauri or totara, and I have never yet been able to get any seeds. Plants taken from the bush, if planted in a cool sheltered place, will succeed, and make lovely specimen trees, but there seems little probability of its ever succeeding as a profitable forest tree in cultivation. White-pine seeds freely, and is easy to grow in a damp place, but under the most favourable circumstances can hardly be called ornamental, and the wood is of little value except for such purposes as our fast-growing trees, such as *Pinus insignis*, would more quickly supply. On the whole, as introduced grasses have to a large extent supplanted the native grasses, so it seems likely that the introduced trees will be found to grow more successfully than the indigenous ones do under cultivation.

In planting for profit there are other considerations to be thought of than which tree will grow best in a particular locality. For in-

stance, larch is generally held to be superior to anything else for mine-props; consequently if larch will grow, although not quite so well as some other good tree, in the neighbourhood of a mining district, the larch would most likely prove the more profitable tree, since it would find a market on the spot.

There are certain valuable trees which have proved themselves everywhere of good constitution, and it appears to me that these are the trees which should be planted largely in New Zealand; other trees more particular about soil and climate may be found to do equally well, but in the meantime it will be safer to plant those trees that have everywhere proved successful, and have given the same promise of success here. Among these I may mention the three cedars, *Cedrus atlantica*, *Cedrus deodara*, *Cedrus libani*, and *Picea pinsapo*, among the more ornamental timber trees, and *Pinus laricio* and *Pinus ponderosa* as the most valuable timber trees which seem to thrive everywhere. Of *Pinus laricio* a standard American author says, after giving an account of its vigorous growth, "As it is a native of warm climates many persons suppose it will prove too tender for this section, but so far as we have been able to ascertain it has given entire satisfaction. The long wavy leaves are of a bright green colour, and the perfect shape of them has always produced a favourable impression with us, and we wish it were more extensively known." The wood is quite valuable for lumber, being long-grained, white, easily worked, and, according to some authorities, very durable. English authors are all equally emphatic with respect to the value of this tree. Webster says, "Whether in an ornamental or economic sense this must be considered as one of if not the most valuable species that is cultivated in this country." The author of "Pinacæ" says of the Corsican pine, "All thing considered, it is one of the most valuable and generally useful species of the genus *Pinus* which has yet been planted in the British Isles, being thoroughly hardy, sound in constitution, of tolerably large dimensions, and of a very rapid and regular growth; and will not only grow, but will produce both quantity and quality of timber equal to any, and superior to many, of its congeners, when grown under the same conditions." Many other authorities might be quoted as to the value of this tree in other parts of the world, and our own experience quite confirms it, as the most likely tree to produce the best and most generally useful timber of all the trees as yet introduced. Seeds of it can be bought in Europe at a low rate, and of good quality, fifty per cent. of which may be expected to germinate. There are about 41,000 seeds to the pound. There is one objection to *Pinus laricio*—viz., it is more difficult to transplant than some of the other pines, and that is my experience; but a tree of so much value is worth the little extra care required in its removal. It is not always the tree that is the easiest to plant that will be of most value to the planter. I was very annoyed to find last winter a public body planting a worthless pine on the recommendation of a nurseryman, and for no other reason than that the percentage of failures would be small; surely it would

be better to pay 10 per cent. more for a valuable tree than a less price for a tree that, when full grown, will not make even decent firewood. Had the *Pinus laricio* been a nurseryman's tree, I have no doubt it would oftener be recommended, and more extensively planted.

The planting of the waste places of the earth with suitable trees is occupying the attention of every civilised country, and it is well that, while New Zealand is borrowing money annually for the development of the country, she should, at the same time, annually plant a few million trees on the uncultivatable portions of the land, as a sort of sinking fund to ease the burden of the "unborn millions" of whom we have often heard, and who will be responsible for the interest at least on the borrowed money. And that this may be a good way of providing a sinking fund, if the work is now well done, is proved by the price—about £10 each—now paid for kauri trees in the North of Auckland.

SECTION III.

ROTORUA.

[By A. S. WOHLMANN, M.D., Government Balnealogist.]*

THERE is no district in the world containing a larger number and a greater variety of hot mineral springs than Rotorua. Their total number is enormous and practically impossible to estimate, for while the number of the large springs must run into hundreds, in some areas small ones bubble up from under the lee of every little rock and wash the roots of every tuft of hardy manuka, until the ground is literally a sieve, where one must walk warily, and where to stray from the beaten track after dark is to court disaster. Such areas as the Kuirau Reserve, the lake-shore from the Sanatorium grounds to beyond the Postmaster Baths, and parts of Whakarewarewa and Ohinemutu are simply riddled, and to form a fresh spring all that is required is a few moments' work with a spade. Stories have got about, which have obtained a wide credence, that the ground is in a constant tremble, that the air always reeks of sulphur, that the place is a veritable Gehenna, to be gazed at and sniffed at with awe—and swiftly departed from. These are "travellers' tales." There are whiffs of sulphur in the air certainly, especially on damp days, but the ground does not tremble, and though earthquakes are not uncommon they are less severe than in other parts of the country. The average visitor, unless he is stopping to take a course of the baths, is whisked off every day by enterprising caterers to see the wonders of the distant districts, ignorant of those that lie at his very door. At Ohinemutu, at Whakarewarewa, even in the Sanatorium grounds, may be seen as fine examples of thermal activity as could be wished, while the Sanatorium gardens afford an endless feast of floral colouring. Here one may take one's tea *al fresco*, sitting at daintily-spread tables, and attended by Maori maidens in picturesque native dress, while a band discourses music, or if more energetically inclined may repair to the beautiful bowling-green, the tennis or the croquet-lawn. Or here the lazy man or the contemplative may sit on a shady seat and smoke his pipe at ease, watching the shadows purple the woods of ever-beautiful Mokoia lying like a jewel on the breast of Rotorua.

The Township of Rotorua has been well laid out. Broad straight streets, planted with avenues of English trees, intersect

* I must express my great indebtedness to Sir James Hector and to Professor Maclaurin for the numerous analyses they have placed at my disposal.

Z.B.

WHAKAREWAREWA.

each other at right angles, lined with little villas each surrounded by its own garden, giving plenty of light and air and space, while the public gardens will more than bear comparison with the finest in the country. Besides the usual public buildings there is an excellent public library, while the town boasts, in addition to easy access by rail, such conveniences of up-to-date civilisation as electric light and a telephone exchange.

To add to its value as a health resort, Rotorua possesses a bright, sunny, bracing climate. Standing as it does, on an inland plateau, at an altitude of nearly 1,000 ft., by a wide expanse of lake, there is nearly always a keen air, and visitors will do well to bring with them warm clothing, and not be misled by such a geographical expression as latitude.

Turning our backs on the lake and following the broad main street of Rotorua for a couple of miles, we come to Whakarewarewa, perhaps the most interesting spot in the whole thermal district. The ground seems fairly alive with every kind of hot spring and hot mud-pools of every size, shape, and colour. The beautifully shaped cones of the mud geysers are especially interesting, as here you may see in the actual process of formation perfect models of the craters of the great volcanoes. Here, too, may be seen several very fine geysers. The action of the largest of these is intermittent. At Whakarewarewa the amount of hot mineral water is simply enormous, millions of gallons bubbling and hissing and seething all around. Finally, here is a Native village of surpassing interest. Women, in crimson and green and purple, puffing stolidly at the inevitable pipe, the inevitable baby slung across their backs; piccaninnies of all shapes and sizes and colours, active bright little beggars, here, there, and everywhere, dodging between the legs of the pakeha, diving from the high bridge for the coins he may throw, shrilly clamorous to dance a haka for him, or sing to him. Anything, alas, to extract the tourist's cash. There are several primitive but very enjoyable baths at Whakarewarewa, notably the Spout Bath, which is practically a hot waterfall, part of the overflow of an enormous spring, and the Oil Bath, somewhat resembling the Rachel.

At Ohinemutu, the old township of Rotorua, one may see, with the exception of the geysers, pretty much the same sights as at Whakarewarewa, but everything is, so to speak, on a softer scale. The Native village seems a thought more civilized; the boiling springs are curbed to a decorous bubble, even the sullen black mud geysers look less blatantly diabolical. Here as at Whakarewarewa one may see the Natives cooking by natural steam over a banked-up spring, and may also, for a consideration, throb to the fierce stamping of a haka in the carved meeting-house, or be lulled by the rhythmic grace of the poi dance.

As a contrast to so much hot water, a trip across the lake to Hamurana is well worth doing. A river of purest water wells up with great force through a shaft of rock—whose iridescent walls

sparkle and scintillate with colour—and runs a short swift course to the lake. The picture of hanging willows and blue waters mantled with red water-weed is one to haunt the memory. But you must go on a fine day.

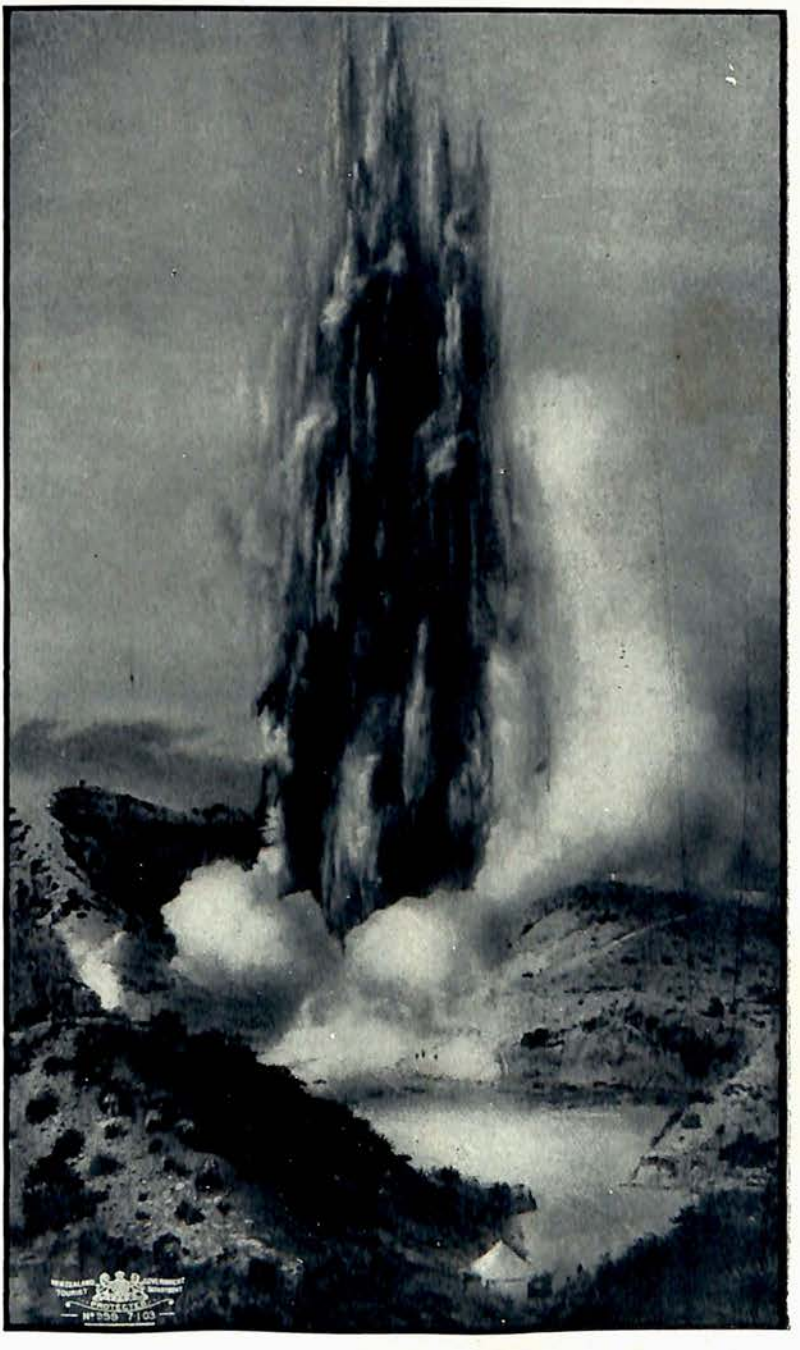
From Hamurana the steamer proceeds to Mokoia, an island stored with Maori legend, and on to Te Ngae, where the coach takes one to Tikitere and Rotorua.

At Tikitere are the same thermal phenomena as at Rotorua, but the mud volcanoes are in a state of even fiercer activity. A short walk along a pretty bush track takes one to the Blue Lake, a sheet of fresh water nestling calmly beautiful in the hollow of a crater of verdure-clad hills.

No one should leave this district without visiting the great fresh-water lakes, Rotoiti, Rotoehu, and Rotoma. Rotoiti can be reached either by road or by water, and is worth going a long way to see. The road, after leaving Tikitere, skirts the lake for miles, here giving a panoramic view of the blue waters, there running round a miniature bay where tiny waves lap a white sandy beach and promontories of rock and forest are mirrored in the calm waters they shelter. Should time permit, passing Rotoehu and along Hongi's Track through the forest, a luxurious bath may be taken in the hot effervescing springs of Waitangi, and a glimpse obtained of Rotoma, perhaps the loveliest of all the lakes. Or, going by steamer, one reaches Rotoiti by the Ohau Channel from Rotorua, and, winding along the other shore of the lake, pries into a succession of exquisite nooks, rich with the luxuriant beauty of native bush down to the water's edge. Leaving the steamer at the far end of Rotoiti, the journey may be continued home by coach *viâ* Tikitere.

Perhaps the most interesting, and certainly the most enthralling excursion of the whole district is that known as the "round trip." This takes one round the scene of the Tarawera eruption of 1886, past the buried village of Wairoa, and past the mighty geyser of Waimangu. Part of the trip is by road and part by water, the interest increasing with every step of the journey till it culminates in Waimangu itself.

Leaving Rotorua by coach, proceeding across the pumice plain, and passing through a narrow belt of bush left undestroyed by the eruption, one suddenly comes on Lake Tikatapu, of an almost unnatural blue, and beyond it Rotokakihi, of an equally fantastic greenish shade. The curious colour of these lakes is due to the suspended mineral matter in the water. Passing these lakes, Wairoa is reached, the village buried by the eruption of Tarawera in 1886. Ruins of the old mill, the hotel, Sophia's whare, and here and there parts of the walls of a cottage still remain; but Nature is busily and successfully engaged in covering up the pathetic relics of the past. From Wairoa a pleasant row or sail across Lake Tarawera lands one at the foot of the volcano, in a wilderness of dried mud, furrowed to an extraordinary degree with storm-water. A short walk, and we



Y B. WAIMANGU.

embark again on Lake Rotomahana, and row past the sites of the Pink and White Terraces, the former still in a state of fierce thermal activity. Boiling springs and steam-holes riddle the hillside, while numerous hot springs rise from the floor of the lake, so that one may enjoy the somewhat uncanny experience of rowing over boiling water and feeling the boat vibrate as to the propeller of a steamer. Disembarking where a deep gorge marks the cleft of the eruption, we follow the course of the overflow water of Waimangu up a fairly stiff incline, till we reach the shelter hut overlooking the geyser, usually hot and panting and more than ready for lunch. Hundreds of feet below us lies a small lake, rather over an acre in extent, looking absolutely quiet and innocent. That this apparently harmless sheet of water may suddenly shoot a thousand feet into the air, bearing with it tons of mud and boulders, seems quite incredible, and it requires all the photographs of the guides to convince the doubters who are disappointed in a display that Waimangu is really a geyser at all. Beside the actual geyser is a boiling lake, the Echo Crater Lake, which looks much more formidable and geyser-like. Though there is a rough periodicity about Waimangu of about thirty hours, yet this is by no means absolute, and however carefully one may plan a visit it is impossible to insure seeing a display. To get over the difficulty, the Government have just erected a handsome "accommodation house," which is really a hotel, commanding a fine view of the geyser and a panorama of Tarawera mountain and the district for miles around.

The Mineral Waters of Rotorua.

Before proceeding to a description of the mineral waters and baths of Rotorua, it may not be out of place to preface the account with a few words on the action of mineral waters generally. There is a largely prevalent idea that the mineral matters dissolved in thermal waters are absorbed through the skin of the bather, enter into his system, and so directly attack the disease. Unfortunately —or perhaps fortunately, for the results in every-day life would be disastrous—this is by no means the case. The skin, partly from the greasy secretions on its surface and partly from the nature of its construction, is quite incapable of absorbing substances in watery solution, except under special conditions. Substances dissolved in a fatty medium may undoubtedly penetrate the skin, and so may certain gases, such as sulphuretted hydrogen, which is abundantly present in the waters, or very finely powdered substances such as the sulphur which is deposited on the skin after a sulphur-vapour bath. Probably, too, a certain amount of mineral water is absorbed when directed on to the skin in fine spray under pressure, more especially if massage is used at the same time, as in the Aix massage douche. A very much larger amount may be absorbed through the lungs and respiratory tract by inhaling the vapours and fumes arising from the waters, and this will explain why it is that silver articles

about the clothing may be blackened by the sulphur exuded through the skin several days after leaving a sulphur district. But when all is said and done, the amount absorbed by the skin and lungs is so infinitesimal that it plays quite a minor part in the therapeutics of thermal bathing, and it is only when taken by the mouth in carefully graduated doses that the medicinal effect of the dissolved salts can be obtained. It is to the mechanical, chemical, and possibly electrical, stimulation of the skin by the thermal waters that the balnealogist trusts for all those curative processes which it is his function to direct, aiding them with massage, passive movements, gymnastics, or electricity, as the case demands.

The skin must be conceived as a structure exceedingly rich in blood-vessels, which, though minute in themselves, are, when taken in the aggregate, capable of containing a large proportion of the whole blood-supply of the body. Remembering, too, that these vessels are capable both of great dilatation and active contraction, and that they can readily be made to dilate or contract by using various mineral waters and varying the temperature of the water, it will at once be seen how profoundly a properly selected mineral bath may modify the circulation, can be made to draw blood to the surface, relieving an inward congestion, or by constricting the skin may flush the deep vessels. It can readily be seen, too, how this action of the skin, which has been termed the "skin heart," may greatly help on the action of a heart perhaps diseased and overloaded, or, again, by injudicious use may thwart that organ and cause fainting or even death. For this reason alone it is about as reasonable a thing to take baths "on one's own" for the cure of disease as to go into a chemist's shop and reach down the nearest bottle "on spec."

The nature of the mineral waters of Rotorua and their source are described below, and full analyses of the principal springs given :—

Nature of the Waters.

While amongst the countless springs arising in the Rotorua district there are, as might be expected, considerable numbers of varieties, and although it is no uncommon thing to observe two springs of almost diametrically opposite chemical properties arising side by side, yet there are certain features common to all.

In the first place, all the mineral springs in the district are hot, and where at times there may appear to be exceptions to the rule it will always be found that the coolness of the water is due either to admixture with fresh water or to evaporation in a basin comparatively large and fed only by a small spring. Without exception, too, the waters contain in solution either sulphuretted hydrogen, sulphurous acid, or both gases. Another invariable ingredient is silica, either in the form of silica, silicic acid, or a combination of that acid with various bases. This is a special characteristic of the waters of geyser regions, and is noticeable in Iceland and in the Yellowstone Park, U.S.A. To this silica is due the formation of those wonderful terraces for which New Zealand has long been famous. The hot water, as it cools and concentrates, being no longer able to keep in solution its dissolved salts, these are deposited in layers, either horizontal and delicately rippled or in stalactite masses, the colour varying generally from white through every shade of grey to pink, according to the nature of the metals present with the silica. The waters, which may therefore be classed under the

heading of sulphurous siliceous thermal waters, may be roughly divided into two main groups—acid and alkaline—with various subdivisions, and it is to the close juxtaposition of these entirely unlike waters that Rotorua owes its unique importance.

GROUP I.—THE ACID SULPHUROUS WATERS.

The distinguishing characteristic of these waters is the presence of free hydrochloric acid, free sulphuric acid, or both, in considerable quantity. In addition, they contain a large amount of alum, sulphate of soda, and iron-oxides, and in the somewhat cumbersome nomenclature of modern science would be classed as acid sulphurous sulphated siliceous waters, a type which does not exist in Europe, though found in the Yellowstone Park, U.S.A., and in Tuscarora, Canada.

Such waters are more suitable for external than for internal use, and for baths of what are known as the "simple immersion" kind they are especially valuable.

"In addition to the therapeutic action which they exert in common with all other thermal baths, these waters possess a very powerful rubefacient action in virtue of the free acids they contain. By rapidly withdrawing large quantities of blood to the skin over the whole surface of the body, they profoundly modify the circulation, relieving congestion of internal organs and inflamed joints and nerves, easing pain and stiffness, resolving exudations, and promoting glandular activity. They act, in fact, in medical parlance, as powerful alteratives.

Besides their use as baths, some of these waters, more especially those containing a large proportion of alum, have been used with great success as astringents, especially as gargles in cases of relaxed and congested throat. The Eggpot, a small but powerful spring near the Postmaster Baths, has long had a reputation for this purpose.

The best-known examples of the acid waters are the springs supplying the Priest and Postmaster Baths.

Class 1.—The "Priest" Water.

This spring percolates through a layer of hot pumice a few feet beneath the surface of the ground, and flows into the lake. The water has a greenish tinge, a very acid taste, an odour of sulphuretted-hydrogen and sulphurous-acid gases, and issues from the earth at a temperature of from 98° to 110° Fahr. The total output it is impossible to estimate, on account of the numerous sources of leakage, but it is very large. The analysis is as follows:—

	Grains per Gallon.
Sulphate of soda	19·24
" potash	Traces.
" lime	7·41
" magnesia	3·03
" alumina	21·67
" iron	1·24
Sulphuric acid	22·12
Hydrochloric acid	3·65
Silica	18·41
Total	96·77

Also sulphuretted hydrogen, 2·98 grains; carbonic-acid gas, 2·16 grains.

The Postmaster.—This spring bears a very close resemblance to the Priest, both in its situation and in its chemical properties, and differs only in containing an even larger proportion of free sulphuric and hydrochloric acids. It may, in fact, be looked upon as a stronger Priest water. It issues from the ground at a temperature varying from 98° Fahr. to 110° Fahr., and the total outflow is about the same as, or rather less than, the Priest spring. The following is the analysis of the water:—

	Grains per Gallon.
Sulphate of soda	32·87
" potash	1·24
" lime	4·93
" magnesia	1·83
" alumina	33·22
Iron-oxides	4·42
Sulphuric acid (free)	30·32
Hydrochloric acid (free)	6·14
Silica	17·61
Total	132·58
Sulphuretted hydrogen	3·02

Two springs near the Postmaster, and at present supplying some unenclosed and almost disused baths, are the Waikupapapa and Ngaruapuia. The waters, as will be seen from the analysis, are practically identical with the Priest water, but considerably weaker.

WAIKUPAPAPA.

	Grains per Gallon.
Sulphate of soda	33·18
" potash	0·26
" lime	2·44
" magnesia	0·24
" alumina	0·32
Iron-oxides	Trace.
Sulphuric acid (free)	4·29
Hydrochloric acid (free)	7·49
Silica	8·23
Total	56·45
Sulphuretted hydrogen	3·61

NGARUAPUIA.

	Grains per Gallon.
Sulphate of soda	29·80
" potash	0·64
" lime	6·87
" magnesia	0·31
" alumina	..
Iron-oxides	Trace.
Sulphuric acid (free)	3·11
Hydrochloric acid (free)	6·76
Silica	12·01
Total	59·50
Sulphuretted hydrogen	Traces.

All the above springs are typical examples of acid, sulphurous thermal water, and form a pale-green solution, perfectly clear, except that on standing exposed to the air there is a tendency to the precipitation of flocculent sulphur.

Class 2.

There is another class of acid water, constituting a connecting-link between the foregoing and the hot mud-springs—that is to say, an acid water containing a considerable and varying amount of mineral mud in suspension. Such a spring is the Coffee-pot—a spring which it is hard to know whether to class under the head of mud or water—and the Cameron Spring arising a few yards from it. These waters, while owing their virtues partly to the salts and free acids in solution, act still more powerfully from the amount of mineral mud in suspension. They had a great reputation among the Maoris, and have fallen into an altogether undeserved neglect. It is hoped that when the new buildings are erected increased use will be made of them for immersion baths.

COFFEE-POT.

	Grains per Gallon.
Silica	13·86
Sulphate of soda	23·71
Chloride of potassium	0·77
" aluminium	1·46
" calcium	2·04
" magnesium	1·62
" iron	1·47
Hydrochloric acid	7·66
Sulphuric acid	7·60
Total	60·19
Sulphuretted hydrogen	3·19

CAMERON SPRING.

	Grains per Gallon.
Sulphate of soda	44·54
Chloride of potassium	1·67
" sodium	12·04
" calcium	5·22
" magnesium	1·28
" aluminium	0·62
Silica	9·22
Hydrochloric acid	5·92
Total	80·51
Sulphuretted hydrogen	4 42

PAINKILLER.

	Grains per Gallon.
Chloride of sodium	46·42
" potassium	1·71
" calcium	2·66
" magnesium	1·47
" iron and aluminium	4·22
Sulphate of soda	29·14
Hydrochloric acid	6·84
Silica	18·02
Total	110·48
Sulphuretted hydrogen	4·84

These springs find their way through a thick stratum of mineral mud, which generally reaches to the surface of the ground, but may be entirely overlaid by a thick rocky crust of silica. As a rule they are also characterized by a very large evolution of gas, chiefly sulphuretted hydrogen and sulphurous acid, with a certain amount of carbonic acid, while they differ from the Priest water in the small quantity of alum in solution.

GROUP II.—THE ALKALINE SULPHUROUS WATERS.

We have seen that the acid waters are without parallel in Europe, and possess certain unique advantages for external use. The alkaline waters represent a type common to many of the most famous spas of Europe, and are suitable both for bathing and drinking. They differ from the majority of European waters in being more siliceous.

These waters are characterized by their very high temperature (180° Fahr. to boiling point), perfect clearness, and soft emollient feel. As a rule they contain somewhat less sulphuretted hydrogen than the acid waters. Springing as they do from greater depths than the acid waters this is only what might be anticipated, as the gas is believed to be formed by the reduction of the sulphates

of the alkaline earths by organic matter under the influence of pressure and heat. Seen in bulk, in a perfectly fresh condition, they present every gradation of colour between a faint blue and a delicate green, but on standing exposed to the air for some time the water is apt to become opalescent as a result of oxidation.

Used for bathing purposes these waters possess certain medical attributes which may be considerably modified by the method of bathing employed. And herein lies their great utility. Taken as simple immersion baths about the body-temperature they act as nervous sedatives, an effect greatly increased by the action of the sulphuretted hydrogen present. Prolonging the immersion, the action of the alkaline salts and the dissolved gases removes the greasy secretions and dead cells of the skin, at the same time flushing it with blood, while the silicates in the water exert a bland emollient action. Hence the value of these waters in certain forms of skin-disease. But it is for douche purposes that these waters are most of all valuable, more especially for that combination of douching and massage known as Aix massage. For this the bland nature of the water, combined with an almost slippery feel, a quality permitting the masseur's hands to glide easily over the bather's skin, and which is really due to a soapy material formed by the action of the alkaline water on the sebaceous secretions of the skin, renders the alkaline waters particularly suitable. Doubtless, too, the siliceous nature of the water increases this effect. At Aix-les-Bains the same quality appears to be due to a low form of vegetable growth in the water called glairine.

For internal administration the alkaline sulphurous waters have valuable properties, and also certain drawbacks, the most serious of the latter being their extremely nauseous taste. Happily, however, if the water is taken at first in small doses, which are gradually increased from day to day, the distate not only steadily lessens but is often replaced by a positive enjoyment. The water should be taken as fresh and as hot as possible, sipped rather than gulped down, and should be taken on an empty stomach either before meals or in the cooling-room after or before a bath, according to the special effect desired. Thus taken before meals it cleanses the stomach, neutralises acidity, and stimulates the flow of gastric juice in virtue of its alkalinity. In addition, the sulphides, sulphates, and chlorides in solution exert a specific influence on the digestive glands, more especially stimulating the liver, so that the water relieves engorgement of the liver, hæmorrhoids, and, indirectly, constipation. At the same time the amount of iron present, though small, is sufficient to exert a distinctly tonic influence. There remains one important ingredient whose action must be regarded as still open to question—the silica. What therapeutic action, if any, the silicates exert is still a moot point, and my own experience in their use has been hardly long enough for me to venture a positive opinion.

It will be seen from the above that the alkaline sulphurous waters—such as the Rachel—are fairly potent medicines, and not to be taken in indiscriminate quantities without medical advice. More especially patients with greatly enfeebled digestion, profound anæmia, or persons suffering from functional disturbances of the heart should avoid their internal use.

One other application of these waters remains to be considered—their use, in the form of vapour, for inhalation and for vapour baths. At present no facilities exist for inhaling the vapour, but in the new baths I hope to see installed a complete inhalatorium. By increasing the mucous secretions, relaxing the respiratory tissues, and softening and disquamating the epithelium, inhalation of these vapours would be distinctly beneficial in certain cases of chronic bronchitis and asthma.

While on the subject of inhalation it may be remarked that a good deal of involuntary inhalation goes on during a bath, especially when, as in the old form of baths, these are built directly over the source. The amount of sulphuretted hydrogen that bubbles up through the water in the Priest and Postmaster Baths is very considerable, and is largely responsible for the not infrequent cases of fainting in those baths. While not without its use as a skin-stimulant in

the water, and for its action on the nervous system when inhaled, the good is so much more than counterbalanced by the evil that it would be better in all future baths not to build them over the springs, but always to lead the waters to them. The carbonic-acid gas which is present in several of the springs is hardly in sufficient quantity to have any marked therapeutic or toxic effect.

Vapour baths in which the body or part of the body is immersed in the steam arising from the mineral water form a part of the armamentarium of nearly every spa in Europe, and ample provision for them has been made in the designs for the new bath buildings. But, while at present deficient in this respect, Rotorua possesses a "sulphur-vapour bath" which is believed to be unique. From a hot sulphur cavern immediately below the floor of the Blue Bath, steam and hot fumes, principally sulphur-dioxide in a very concentrated form, are led into a vapour "cabinet" of the ordinary type, in which the patient sits immersed with his head projecting through an aperture. It is hardly possible to exaggerate the value of this bath in certain cases. While possessing all the properties of an ordinary vapour bath, the sulphurous fumes of themselves have an intensely stimulating effect on the skin; while, in addition, sulphur in the finest possible powder is deposited on the whole surface of the body. Under such a combination of circumstances quite an appreciable amount of sulphur is absorbed into the system, while at the same time all the effects mentioned before as attributable to immersion in Priest water are brought about.

Analyses of the Alkaline Waters, in Grains per Gallon.

	Rachael.	Oil Bath. (Whakarewarewa).	Waikiti (Ohinemutu, 1903).
Sodium-chloride ..	69·43	66·34	38·75
Potassium-chloride ..	3·41	1·46	..
Lithium-chloride ..	Traces	Traces	..
Sodium-sulphate ..	11·80	7·49	2·72
Potassium-sulphate ..	..	..	2·70
Sodium-bicarbonate ..	..	..	20·03
Calcium-bicarbonate ..	..	..	0·82
Magnesium-bicarbonate	..	..	0·74
Iron and alumina oxides	2·41	..	..
Alumina	..	..	0·16
Silica	5·87	..	24·36
Sodium-silicate ..	18·21	2·08	..
Calcium-silicate ..	4·24	3·16	..
Magnesium-silicate ..	1·09	0·76	..
Ferr. silicate ..	..	0·85	..
Totals ..	116·46	82·14	90·28

Also sulphuretted hydrogen and carbonic acid.

Source of the Waters.

The appearance of an acid and an alkaline spring alongside flashes at once across the mind the inevitable query "Why?" How is it that two such antagonistic waters can outflow so closely together without mixing and neutralising one another? Evidently their sources, or at any rate one of their sources, must be far distant from their outlet. Very deep vertical or sinuous fissures in the earth's crust might account for the phenomenon, or one vertical shaft penetrating a horizontal and superficial water-bearing stratum. A close examination of a large number of springs inclined me to the latter opinion.

The foreshore of Lake Rotorua for more than a mile is riddled with acid springs, which seem, so to speak, to ooze from the surface pumice. By digging down a few feet in almost any part of this area one strikes a layer of acid

sulphurous water closely resembling the Priest water. It is significant, too, that the temperature of the Priest Baths is materially lowered by a heavy rainfall. The alkaline waters in this area, on the other hand, are ejected with a certain amount of force from deep shafts, whose walls are lined with a silicate deposit soft under the water, of stony hardness where exposed and dry. It is impossible to measure the depth of these shafts, as their walls are not vertical, but they are certainly of considerable depth—the Rachel Spring, for instance, has been sounded to a depth of 150 ft. There is a close resemblance, both in the nature of the outlet-shaft and in the character of the water, between these springs and the geysers of Whakarewarewa; and even the quietest and most placid pools—such as the Rachel—will exhibit geyser action if the pressure on them is suddenly lowered, as by rapidly running off a large quantity of water.

The physical configuration of the springs, then, would point to the supposition that the Priest water is a superficial layer separated from a deeper level of alkaline water by some impervious stratum, pierced here and there by vertical shafts which allow the alkaline water under a considerable degree of pressure, to reach the surface. To test the truth of this theory shafts were sunk in various parts of the Sanatorium grounds, both in sulphur-beds, where one might expect to obtain hot water, and in apparently sound places overgrown with trees 30 ft. high. In all cases hot, acid, sulphurous water was obtained at a distance varying from 5 ft. to 12 ft. below the surface. Certain strata, more especially a black-cinter layer, contained water in larger quantities and higher temperatures than others, the thermometer registering anything from 110° Fahr. to 160° Fahr. An analysis of one of these "artificial springs" will be seen below under heading A. On digging through the floor of spring A we came upon a dense stratum of white clay some 12 ft. thick, and boring through this with a 6 in. iron pipe we came on a plentiful supply of a neutral water, richer in chlorides, of a temperature of 187° Fahr., and altogether more approximating in character to Rachel water (analysis B).

Analysis, in Grains per Gallon.

	A.	B.
Silica	16·80	16·80
Alumina	20·36	4·10
Iron-oxide	1·10	0·15
Lime	0·56	0·56
Magnesia	0·61	0·20
Soda	2·46	13·33
Potash	0·40	0·80
Chloride	3·55	14·41
Sulphuric acid	57·40	12·60
Total	103·24	62·95
Sulphuretted hydrogen	6·2	2·98
Acidity, calculated as sulphuric acid	11·31	Neutral.

Spring B bears a close analogy with the Spout Bath at Whakarewarewa, which is also a nearly neutral spring.

Spout Bath.—Analysis, in Grains per Gallon.

Silicate of sodium	16·32
Silicate of calcium	1·61
Silicate of magnesium	1·14
Silicate of iron	0·39
Sulphate of sodium	13·47
Chloride of potassium	1·24
Chloride of sodium	53·61
Phosphate of alumina	Traces
Total	87·78

The Baths.

The baths of Rotorua are designed expressly to cater for the needs of two distinct types of bathers—those who come for pleasure and those who come for "the cure." For the former there are hot swimming-baths which are amongst the finest in existence. The enormous supplies of hot mineral water available enable us to keep up three large swimming-baths, always filled with water at the body-temperature. These are entirely emptied and cleaned out every week, while a constant stream of clean hot water is always flowing in, and bathers have this additional guarantee of the purity of the water: that unless this constant inflow of fresh hot water is kept up the temperature of the bath must inevitably and rapidly sink.

The Duchess Bath is a fine swimming-bath 40 ft. long and 20 ft. broad, enclosed in a building lofty enough to prevent any feeling of stuffiness. Here one may get a luxurious swim and a cold shower in independence of the weather. On either side of the swimming-bath is a suite of private rooms containing a bath-room, and a really sumptuous dressing-room, lavatory, cold shower, and hot douche. These baths, which are open to ladies one half the day and gentlemen the other, are all supplied by the Rachel spring, which is noted for the soft emollient nature of its water.

The ladies' swimming-bath, also supplied by the Rachel spring, is open to the sky, and measures 48 ft. by 24 ft.

The third swimming-bath, the Blue Bath, 62 ft. by 23 ft., is reserved for gentlemen, is also open-air, and is fed by the water from the Malfroy geysers.

In the same building is the sulphur-vapour bath already described.

The main block of buildings, the Pavilion Baths, is divided into separate wings for ladies and gentlemen. Here are situated, in addition to the ladies' swimming-bath, the immersion baths supplied by the famous "Priest" water and suites of public and private baths supplied from the Rachel spring. Under the same roof are the mud baths, comprising "complete immersion" and "local" mud baths.

At the ticket-office may be obtained hot Rachel water free for drinking purposes, and cold Te Aroha water—a strongly alkaline saline—at 1d. per glass. It is hoped to be able before long to retail here several of the more important waters of the colony at a nominal price.

Behind the Duchess Bath, in an unpretentious wooden building, are the ladies' and gentlemen's Aix massage baths. These are very comfortably fitted up with cooling-rooms and private dressing-rooms, while the walls of the bath-rooms are lined with plate glass to insure absolute cleanliness. The Rachel water, under hydraulic pressure of about 40 lb. to the square inch, supplies the various douches, and the whole is in charge of a thoroughly experienced masseur and masseuse, who, in addition to a knowledge of massage and douching, are expert in the Swedish movements and gymnastics.

Half a mile away along the lake-shore, in the direction of Whakarewarewa, are the Postmaster Baths, similar in construction to the Priest Baths, with a male and female side, but open to the air. Their special use and nature have already been touched upon.

At Whakarewarewa are the Spout Bath already mentioned, and several other baths at present in private hands.

Tariff.—The cost of the baths is really remarkably low, and varies from 6d. for certain public baths to 2s. 6d. for the Aix massage.

Season.

The season may be said to last all the year round, for while the great majority of visitors crowd to Rotorua during the summer there are large and increasing numbers who have learned from past experience that Rotorua is much more comfortable in the autumn and winter, when we enjoy week after week of still, clear, bracing days, with a genial sun and an absence of that gusty wind which is the chief drawback of the climate in early summer.

Routes of Access.

Rotorua may most easily be reached by rail from Auckland. The express leaves Auckland every morning, arriving in Rotorua in comfortable time for dinner in the evening. As a dining-car is now to be attached to this train the journey will be made very much more comfortably than heretofore. This train connects with the Australian boat from Sydney to Auckland.

Another route is overland *via* the Wanganui River and Taupo; a most interesting and charming way in summer, but, owing to the long coaching journey, somewhat uncomfortable in winter.

Accommodation.

There are four hotels and about twenty boardinghouses, and the number of the latter is steadily increasing; but during the height of the season, especially if some special function such as the Carnival or a public holiday is on, it would be wise to engage rooms in advance.

Length of Time Required for a Cure.

This it is impossible to state, so much depending on the nature and severity of the case, but, striking an average, a month would be a very fair allowance. Indeed in very severe cases it is as a rule better not to prolong a stay over several months, but rather to go away after six weeks or so and return later.

The sufferer must not expect a Pool of Bethesda at Rotorua: we do not profess to do impossibilities, and are only too well aware of our limitations; but this much may be affirmed with absolute sincerity, that nowhere in the known world exist finer bathing-waters for the relief of suffering humanity.

WAIOTAPU.

Taking coach at Rotorua, and turning sharply to the right from Whakarewarewa, a drive of twenty-one miles brings one to Waiotapu. From the time the first gorge is left, with boulder-strewn Puarenga rushing far below, the conduit supplying Rotorua with water winding snakily beside it, the road is comparatively uninteresting until Kakaramea is reached.

Maunga Kakaramea—Rainbow Mountain—owes its name to the extraordinary richness and variety of colouring of its steeper slopes, due to the coloured earths of which it is largely composed. In a single roadside cutting one may pick up specimens of earth of the most intense red, purple, and orange, with every gradation through delicate pinks, greys, and greens to pure white. There is an easy track to the summit.

Passing an intensely green still lake at the foot of Kakaramea, a short drive brings one to the Waiotapu Hotel.

Many people look upon Waiotapu as merely a place to halt at for lunch on the road to Taupo, but it is well worth spending a few days here. Space forbids anything like an adequate description of this wonderful valley. Here may be seen on a gigantic scale every kind of hydro-thermal activity: enormous boiling cauldrons, mud geysers on a scale nowhere else attempted, hot cascades and waterfalls, steam-holes, alum caves, and an immense variety of mineral waters.

WAIRAKEI.

From Waiotapu the road leads across an interminable pumice plain to Taupo. The Waikato River, now rolling majestically, now thundering over falls and rapids, alone breaks the monotony of the journey. Away to the left can be seen the steam from the Ohaki spring, while in the far distance rise the snowy peaks of the volcanoes Ruapehu and Ngauruhoe.

A few miles before reaching Taupo we come to Wairakei, a veritable oasis in the desert of pumice, fern, and manuka. On no account should the traveller miss Wairakei. Waiotapu holds us with its weirdness, but Wairakei is magnificent. Through the hotel gardens, fed by innumerable springs, runs literally a river of hot water, in which you can swim under the overarching trees, a cold stream running alongside for the delectation of the hardier spirits; at points along the stream cascades of hot water form natural shower-baths amid fern and moss and shrub. Finally, in one high fall, the mineral water serves a purpose which is, I believe, unique—to drive a water-wheel and cut chaff.

There are two main groups of springs in two distinct valleys: one, the smaller, consisting of a large number of springs of an aluminous, sulphurous, and chalybeate nature, the overflow of which constitutes the hot river; and the other, and larger, the "Geyser Valley," in which most of the waters are of an alkaline saline

nature. Here may be seen a large number of geysers of all sizes, which differ from those of Whakarewarewa in the extreme frequency and regularity of their action and in their beautiful surroundings. Any one with half an hour to spare may be quite certain of his patience being rewarded by seeing at least one geyser play.

Taupo.

Many miles before reaching Wairakei the landscape is dominated by the frowning extinct crater of (Tau Hara.) As the road twists and turns round the low hills at its base, the great mountain seems ever elusive, never getting nearer, and, in fact, even when we reach Taupo after hours of driving, we seem still as far off the mountain as ever. This peculiarity of a conical mountain is due of course to the fact that one face of it is so much like another as to be indistinguishable; we have simply driven round it. The same phenomenon is very noticeable in passing Mount Egmont.

The Aratiatia Rapids are best visited from Wairakei, but a splendid view of the Huka Falls may be obtained from the coach-road between Wairakei and Taupo. It is a really magnificent sight to see the huge mass of purest water, of the most delicious green colour, pour thunderously over the falls. One realises what an immense force it is the electrical engineers propose to harness.

Taupo is a pretty little place overlooking the lake, and commanding quite a Swiss view of the snowy giants opposite.

There is a choice of three hotels for the traveller: the Lake Hotel, most convenient for the steamer and the through route to Wanganui; the Spa, and the Terraces, with hot mineral baths attached.

Taupo, standing as it does at an altitude of 1,250 ft. in the very centre of the North Island, with a fine bracing climate, a magnificent lake, and absolutely unlimited supplies of hot mineral water, can hardly fail to become in the future one of the foremost health resorts of the country.

The Spa Hotel consists of a series of cottages grouped about a pretty garden, through which runs a stream of hot mineral water. There are a number of comfortable baths, and several kinds of mineral water flowing in astounding quantities. The whole is in a sheltered sunny valley, and should prove a perfect haven for those in search of a quiet restful winter resort.

Some 200 ft. above Taupo is the Terraces Hotel. In its grounds is a deep and picturesque ravine in which arise a large number of springs of different kinds. The outflow of mineral water here is really enormous, and many of the springs possess valuable medicinal properties.

In addition to several hot springs which arise from the shore of the lake between the Terraces and the Lake Hotel, there is another group along the bank of the Waikato River, including some exceedingly interesting geysers.

Y.B. Maori Woman Cooking.

At Tokaanu, across the lake, are several very large hot springs, of varying nature, which on account of the enormous number of springs in this district have been comparatively neglected. Had they been situated in any European country they would long ago have obtained worldwide reputation.

Orakei Korako.

Orakei Korako may be reached either by driving over from Wairakei or by riding from Atiamuri by the new road beside the Waikato, a most picturesque route.

There are two objects at the springs which are alone well worth going to see—the Terraces, which since the destruction of the Pink and White Terraces are the finest in the colony, and the Alum Cave. Surely if any spot deserved the epithet "fairy" it is this grotto. In a cliff overlooking the Waikato, with the everlasting dingy scrub and scrubby fern around, one suddenly comes on an opening in the cliff half-hidden with vegetation. Descending by a rough boulder-strewn track, one enters fairyland. A hundred feet overhead the cliff-face shelves into the grotto. Purple and orange, green and crimson, the roof is iridescent with every colour, while at the very bottom of the grotto, where painted roof meets painted floor, is an exquisitely beautiful pool of hot water, delicately green, its perfectly still surface reflecting the coloured walls. The sloping floor of the cave is filled with stately nikau palms, growing luxuriantly in the warm steamy atmosphere. To the left of the pool is a narrow opening leading into a large cave, whose floor is a pool of hot water, and whose atmosphere is like the hottest room of a Turkish bath. Here the guide will momentarily disappear, to appear torch in hand in the mysterious depths, lighting up the cave with weird effect. The atmosphere, however, does not invite too long a sojourn.

There are a very large number of valuable mineral springs at Orakei Korako, but on account of the inaccessibility of the spot they have hitherto been used only by the Maori.

Okoroire.

These springs may be reached from Rotorua either by rail or road. In either case, the route passes through charming scenery.

Taking the coach by preference, and skirting the foot of Ngongotaha along the western side of the lake, we reach the bush some ten miles from Rotorua, after a long pull uphill. Thenceforward the road runs for miles through beautiful bush scenery, and by the time the mid-day halt is made the keen air—we are some 2,000 ft. up—has made lunch a welcome duty. As the coach begins the descent of the opposite face of the mountain-chain the scenery gets finer and finer, until it culminates in a magnificent panorama of wooded ridge and rocky crest, with deep luxuriant gorges in between, and beyond the broad valleys of Thames and Waikato, the far horizon serrated with blue hills. A few miles across the plain and we come to Okoroire.

Here the River Waihou forces its way through a narrow cleft of rock, foaming into a broad basin, on whose margin are situated the springs, overhung with trees and banks of fern. Close behind is the hotel with its lazy verandahs, its orchards, and its farmyard. The waters, which are mildly saline and comfortably hot, have been led into the baths close to the river-side, and constitute a particularly pleasant and inviting dip. Jammed in the narrowest cleft of the river's course is all that is left of a large Maori canoe which tradition says was wrecked in its present situation during a foolhardy and fatal attempt by a visiting tribe to paddle through the rapids. There is good trout-fishing in the river, and altogether for the angler, and for the bather in search of quiet comfort, Okoroire is a charming spot. Within driving distance of Okoroire are the fine hot springs of Mata Mata, which are well worth a visit and a bathe in.

Upper No. 2 Bath.—Analysis.

	Grains per Gallon.
Calcium-sulphate	2·77
Magnesium-chloride	0·69
Sodium-chloride	9·48
Sodium-carbonate	17·18
Potassium-carbonate	1·42
Iron-oxide	1·10
Silica and silicates	9·70
Total	42·34

Flow, 1,300 gallons per hour. Temperature, 113° Fahr.

Fairy or Open-air Bath.—Analysis.

	Grains per Gallon.
Calcium-sulphate	2·42
Calcium-carbonate	1·84
Magnesium-carbonate	1·03
Sodium-chloride	4·34
Alkaline oxide	11·41
Iron-oxide	0·70
Silica and silicates	9·82
Total	31·56

Flow, 4,100 gallons per hour. Temperature, 99° Fahr.

Te Aroha.

One of the best and certainly one of the prettiest resorts in New Zealand is Te Aroha. Nestling at the foot of a high richly-wooded mountain, on the edge of a wide plain, the first view of it from the railway recalls irresistibly one of those pleasant little watering-places one finds in quiet nooks on the Continent of Europe. Only a chalet or two perched among the pines is wanted to make the illusion complete.

Situated in a large garden, prettily terraced on the hillside, are dotted about a large number of baths. Some of these are small buildings erected either over or alongside a spring, as, for instance, No. 1, which is reserved for ladies; but the central block constitutes quite a handsome and picturesque bath-house, with a large number of private baths, and, with the exception of the Aix massage bath at Rotorua, is the most up-to-date bathing establishment in the colony.

Te Aroha differs from most of the spas of New Zealand in this important particular: that, while their most striking feature is their enormous outflow, at Te Aroha the flow is distinctly limited. Luckily this limitation is more than counterbalanced by the medicinal properties of the water. While Rotorua is a bathing resort, Te Aroha is essentially a place for drinking the waters, and when we speak of a "limited supply" the term is comparative only, for there is ample to supply the needs of the whole of Australasia.

The waters much resemble those of Vichy (France), but are distinctly stronger. A gallon of Vichy water, for instance, contains 319 grains of sodium-carbonate, while Te Aroha spring No. 6 contains 499 grains. Drinking the water is of value in many cases of dyspepsia, and in certain forms of liver and kidney disease; but sufferers are warned that the waters are not suitable for each and every case, and it is better to take medical advice before starting on a course.

Another small spring has lately been discovered, the analysis of which is appended below as No. 19.

ANALYSIS OF EIGHTEEN MINERAL WATERS FROM TE AROHA.—No. 4423.

Alkaline Waters 1 to 15, 17 to 18.

No.	Temp. in deg. Fah.	Dimensions of Bath.	Quantity of Water in each.	Chloride of Sodium.	Chloride of Potassium.	Sulphate of Soda.	Carbonate of Lime.	Carbonate of Magnesia.	Carbonate of Soda.	Alumina.	Iron Oxide.	Silica.	Total Grains per Gallon.
		Ft. in. Ft. in.	Gals.										
1	102	9 10 x 7 0	1,607	60·25	1·72	38·32	10·77	6·86	461·56	Trace	Trace	7·56	586·96
2	112	9 7 x 8 5	1,725	60·45	1·90	32·67	7·12	4·21	426·29	"	"	7·12	539·76
3	112	...	...	60·51	(with the sodium chloride.)	32·82	7·24	4·20	429·19	"	"	7·21	541·17
4	92	11 0 x 9 0	1,771	34·24		19·16	4·62	2·14	246·49	"	"	5·17	311·82
5	100	6 7 x 5 8	998	68·77		36·92	6·91	3·15	476·58	"	"	6·10	598·43
6	104	11 0 x 9 0	2,660	66·23		35·14	7·12	2·99	499·75	"	"	7·14	618.37
7	86	7 6 x 5 0	1,009	67·13		34·04	7·46	4·34	444·20	"	"	7·01	564.18
8	109	...	...	66·14	1·96	32·91	7·47	4·21	451·97	"	"	8·60	573·26
9	112	...	...	41·29	...	22·16	4·94	2·61	301·17	"	"	6·44	378·61
10	96	...	...	35·24	...	19·19	4·67	2·31	276·19	"	"	6·00	343·60
11	88	...	...	34·69	...	20·12	5·11	2·56	261·44	"	"	6·11	330·03
12	88	...	...	41·66	...	22·96	5·12	2·99	300·97	"	"	7·11	380·81
13	120	...	...	40·67	...	21·86	6·11	3·13	301·64	"	"	6·86	380·27
14	122	...	...	42·61	...	23·16	7·14	3·49	321·64	"	"	6·66	404·70
15	139	...	...	43·11	...	22·16	6·91	3·61	331·76	"	"	7·05	414·60
17	...	...	...	2·71	...	3·92	0·64	0·27	9·36	...	...	4·21	21·11
18	...	...	...	16·12	...	8·16	1·97	1·01	131·73	Trace	Trace	13·14	172·12

19. Sodium-chloride ... 26·57 | Sodium-sulphate ... 18·19 | Magnesium-bicarbonate 11·24
Potassium-chloride 1·08 | Sodium-bicarbonate ...179·81 | Ferrous bicarbonate... ·12
Lithium-chloride traces | Calcium-bicarbonate... 31·82 | Silica ... ... 3·92

Total solids, 272·75.
Free carbonic acid, 71 grains.

In addition to these springs there are several in private hands. This year (1903) the springs and baths were transferred from the Domain Board to the Department of Tourist and Health Resorts, and placed in charge of Dr. Kenny, late of Rotorua, who may be consulted at a fixed fee.

HANMER AND OTHER GOVERNMENT TOURIST AND HEALTH RESORTS.

Hanmer Springs.

The Hanmer hot mineral springs, on a plateau of North Canterbury, 1,218 ft. above sea-level, are one day's journey from Christchurch by rail and coach. The train leaves Christchurch daily for Culverden, thence coach to Hanmer. There is good accommodation at the Government Spa, Mr. J. B. Gould, manager. Natural hot mineral water and private baths are provided at the spa. Hot-air and douche baths and massage are available. The baths are sulphuretted saline water, valuable for both external and internal use in cases of rheumatism, gout, and certain forms of indigestion, kidney-complaints, and skin-diseases. Inhalation, in certain forms of bronchitis and asthma, is also found effective.

A tennis-court, croquet-lawn, and bowling-green are provided for the use of visitors. There is good trout-fishing in a number of streams within easy reach of the spa.

Mount Cook.

The Mount Cook Hermitage Hotel—under the control of the Government Tourist Department—is situated in the heart of the Southern Alps. The Hermitage is 2,506 ft. above sea-level. It is reached from Christchurch or Dunedin by rail and coach. Trains connect at Timaru for Fairlie, thirty-nine miles. At Fairlie the traveller changes to the coach for the rest of his journey (ninety-six miles). A night is spent *en route* from Fairlie to the Hermitage at Lake Pukaki, where there is a Government hotel. Guides and horses are obtainable at the Hermitage. The hotel is a building of thirty-five rooms, with stabling and paddocks for horses. Cook's coupons are accepted at the Hermitage. The glaciers within easy distance include the great Tasman Glacier (one of the largest in the world), the Murchison, Godley, Mueller, and Hooker. Mount Cook (12,349 ft.) and the surrounding mountains are within convenient distance of the Hermitage. From the Ball Hut (3,404 ft.) and Malte Brun Hut (5,700 ft.), erected for the shelter of climbers, in the vicinity of Mount Tasman, many alpine excursions may be made. The Ball Hut is twelve miles, and the Malte Brun about twenty miles from the Hermitage. The west coast may be reached from here, *vid* the Hooker Glacier, Fitzgerald's Pass, and the valleys of the Copland and Karangarua Rivers.

The Southern Lakes.

The most easily accessible of the Otago lakes is Wakatipu, which is fifty-four miles long, 1,069 ft. above sea-level, and has a depth of 1,252 ft. Queenstown, on the shores of this lake, is reached in one day from Dunedin or Invercargill by rail (174 miles or eighty-seven miles) to Kingston, thence by Government steamer twenty-five miles. From Queenstown, where there is good hotel accommodation, the ascent of Ben Lomond (5,747 ft.) and other mountains may be made on horseback. The Government steamers run to Kinloch and Glenorchy, at the head of the lake, whence excursions may be made to Mount Earnslaw (9,300 ft.), by horse and on foot, to Paradise (by buggy), and to the Routeburn Valley, the Dart River, Rere Lake, &c. There is an alpine route through from Greenstone on the shores of the lake, *via* the Hollyford River, to Martin's Bay on the west coast (sixty-three miles), also a track from Mount Nicholas to Lake Te Anau *via* the Keys.

Lake Wanaka (928 ft. above sea-level and thirty-five miles in length) may be conveniently visited from Wakatipu. A coach runs from Queenstown to Pembroke, on Lake Wanaka, a distance of forty-one miles. The service is bi-weekly in summer and weekly in winter. There are hotels at Pembroke, and an accommodation house at Makarora (the head of the lake). Steamers ply on the lake and may be hired as required. Lake Hawea (134 ft. above Wanaka) is ten miles distant by a vehicle-road. There is good red-deer stalking in the vicinity; trout abound in the streams and in Lakes Wanaka and Hawea. A track leads from the head of Lake Wanaka over the Haast Pass (sixteen miles distant) to the west coast, connecting with the road to Hokitika.

Lake Te Anau, forty-two miles long, and 694 ft. above the sea, is reached by train and coach from either Dunedin or Invercargill—train to Lumsden, thence a coach journey of fifty-two miles to Te Anau, occupying a day. There is a comfortable hotel at the coach terminus on the shores of the lake. A small steamer runs to the head of the lake, where there is an accommodation house. From here visitors may walk to Sutherland Falls and Milford Sound. The track leads up the Clinton Valley, over Mackinnon's Pass to the Sutherland Falls (nineteen miles), and Milford Sound (thirty-five miles). The Sutherland Falls (1,904 ft.) are the highest in the world. There are shelter huts at convenient distances along the route. Guides are obtainable at Te Anau. There is an accommodation house at Sutherland's, Milford Sound, opposite Mitre Peak. An oil-launch is available for excusions on the Sound. From the upper part of Lake Te Anau there is a good track to George Sound (thirteen miles), *viâ* Lakes Hankinson and Thompson. A rowing-boat is available on the Sound, and huts are provided for visitors.

Manapouri Lake (elevation 597 ft.) is visited from Lake Te Anau. The distance between the lakes is six miles, but the accommodation houses are thirteen miles apart. A coach traverses the

intervening distance, in connection with the steamers on the lakes and the coaches from Lumsden. Manapouri may also be reached by coach (thirty-eight miles) from Otautau, which is thirty-two miles from Invercargill by rail. Manapouri is the deepest of the New Zealand lakes, having an extreme depth of 1,452 ft. There is a small steamer on the lake; it may be engaged by visitors as required. This lake is regarded by many as the most picturesque in New Zealand.

Stewart Island.

Stewart Island is reached by steamer (weekly service) from the Bluff, a distance of twenty-four miles. There are accommodation-houses at Oban (Half-moon Bay), where the steamer calls, and at the bays round the coast. An auxiliary oil-ketch and other boats may be hired at Oban for coastal cruises, and excellent fishing is to be obtained. Bathing, boating, and deep-sea-fishing excursions are the chief attractions of the island. Walking-tours may also be made to the summits of Mounts Anglem (3,200 ft.) and Rakiahua (2,217 ft.), and other wooded peaks.

Small coasting-boats (sail and screw) take visitors when required to Paterson Inlet, the Neck, and other scenic resorts. Two of the most attractive spots, Port Adventure and Lords River, may be visited in one day from Oban. The boardinghouses at Oban are capable of accommodating a large number of visitors; there are several stores in the township.

NOTES ON THE COOK AND OTHER PACIFIC ISLANDS ANNEXED TO NEW ZEALAND IN 1901.

[Taken from a report, dated 28th February, 1902, of the Resident Commissioner at Rarotonga, and a series of descriptive articles by Mr. Josiah Martin.]

THE COOK GROUP.

Rarotonga.

Distant from Auckland, 1,638 miles; circumference, 20 miles; height, 2,920 ft.; area, 30 square miles; population, 2,060.

Land and Land-tenure.

Rarotonga is, beyond all doubt, the most fertile and valuable of the Cook Group, and it has the largest population. The island has been exceptionally favoured by nature, not only with delightful scenic attractions, but also with a remarkably rich and productive soil—the source of abundant wealth. The secret of its great fertility is its excellent water-supply, which is due to its elevation. The climate, too, is most favourable, not only to vegetable but also to animal life. The island is, however, one of the least planted, for there are many tracts of land of the best quality on the south, west, and north-west coasts that produce little if anything. It must have supported at one time a population of many thousands, but they are now reduced to about 2,100 natives and whites.

At present the country is overrun with noxious weeds, some of them of very recent introduction; and they are spreading with a rapidity that necessitates the most persistent efforts to keep cultivated areas free from them. The cotton scale blight has also made its appearance in this and other islands.

The land-tenure of Rarotonga is as follows: In very ancient times the land was divided amongst the crew of the canoe that first took possession of the island, and the representatives of the eldest branch of each family are now known as Arikis, or Mataiapos, according to their original rank on landing. These chiefs have at all times been recognised as trustees for the descendants of the original ancestor who resided on the land; but they now claim the right to expel any man who dares to assert his independence, or act in any manner contrary to the views of his overlord. In olden days, when it was essential to the existence of a tribe that all should be of one mind and obedient to the chief, any one disputing his will might well have been turned off the land with the consent of the whole tribe. Now, however, this consent is not always deemed necessary by either Ariki or Mataiapo.

The People.

The aborigines of Rarotonga are very closely akin to the Maoris of New Zealand, and probably at one time had frequent intercourse with them. They are not naturally industrious, nor have they had any reason for becoming so; but as they are quite aware of the value of European goods, it may be concluded that they would work willingly enough if inducement offered. Industry would probably follow good land regulations; but these, it is considered, should compel a certain amount of fencing to be done every year.

The Seat of Government.

The seat and centre of the government of the Cook Islands—the double township of Avarua and Avatiu—is situated on the north or lee side of the Island of Rarotonga, opposite two small openings in the coral reef. The former has the advantage of a boat harbour, where small craft can be moored in safety when the wind is not blowing in from the sea. The residence of the Commissioner and the establishment of the ex-queen are situated here.

Though the dwellings of the natives are built of coral concrete, the Government offices are constructed of wood, and are not imposing in appearance.

Trade.

The value of goods imported into Rarotonga for the Cook and other islands for six years gives an average as under: From New Zealand, £15,137; from Tahiti, £7,724: total, £22,861.

Exports for the same period from the Cook Group: To New Zealand, £17,000; to Tahiti, £2,904: total, £19,904 per annum. From Penrhyn and other islands, *via* Rarotonga, £1,956.

The exports from Cook Islands comprise: Copra, 33 per cent.; fruit, including limejuice, 33 per cent.; coffee, 30 per cent.; cotton and other goods, 4 per cent. From Penrhyn and other islands: Pearlshell, 90 per cent.; copra, 10 per cent.

MANGAIA.

Distant from Rarotonga, 116 miles; circumference, 30 miles; height, 656 ft.; area, 30 square miles; population, 1,541.

Physical Features.

Mangaia is the most southerly island of the Cook Group, and is second in importance to Rarotonga only on account of its difficult and dangerous coast. A fringing reef closely surrounds the island, and there is no break or passage through which a boat can reach the shore. The sea-face of the reef is so steep that vessels can only with the greatest difficulty obtain an anchorage. Communication between them and the islanders is carried on by the latter in canoes, which they navigate most skilfully through the surf on the reef.

Mangaia is almost circular. Around it, rising gently from the shallow lagoon within the reef, is a narrow, sandy beach. From this there rises, almost abruptly, a steep cliff about 100 ft. in height of jagged and broken coral rock, pierced and tunnelled with numerous fissures and caves. On the top of this rise is a level plateau, known as the "makatea," which extends, about a mile in average width, nearly all round the island. The inner edge of this flattened ring descends again almost to sea-level, enclosing an ancient crater. In the midst of this rise several volcanic mounds, the highest having an elevation of 656 ft. The hollow area is drained by natural subterranean channels under the "makatea" into the sea. The eastern side of the island is a desert of basalt rock.

Productions.

Cocoanuts, bananas, oranges, limes, citrons and other fruits grow plentifully. The annual export of copra is large, as is also that of perishable fruits. The natives have cultivated much of the land, and owing to their industry the productions of the island have a favourable name. The coffee is the best produced in the Cook Group, not from any superiority of soil or climate, but because of the care exercised in picking and drying the berries.

As the general fertility of the land is below that of the other islands of the group, the natives produce better results because of the consequent necessity for cultivation. The "makatea" is especially suitable for the citrus family. Unfortunately the uncertainty of communication has prevented the development of the limejuice industry. In former years cotton was grown in large quantities and exported.

Mangaia is one of the few places in the world of which it can be said that every man, woman, and child owns land on defined boundaries sufficient for his or her support. From the most ancient times the soil has been most minutely subdivided.

Atiu.

Distant from Rarotonga, 116 miles; circumference, 20 miles; height, 374 ft.; area, 32 square miles; population, 918.

The Island.

Atiu resembles Mangaia in formation, being a raised mass of coral with high jagged cliffs facing the sea. It has a similar barrier to shipping round its shores, and communication with vessels must be by canoes launched over the sea-wall through the breakers. Every inch of Atiu is worthy of cultivation, though it has not that appearance of fertility that is so characteristic of Rarotonga and Aitutaki. The bare central ridge, with its red soil and low-growing fern, is deceptive, for it is really the best land.

Its Resources.

On the highest point of the ridge cocoanuts, bananas, oranges, and coffee grow with the utmost luxuriance; and the kumara, most valuable and uncertain of South Sea vegetables, yields large crops. The cocoanut-palm grows well everywhere, but especially so on the coral rock formation, though only a few hundred trees are to be found there. Coffee and oranges grow vigorously, but very few trees are to be seen. There is, however, an excuse for the non-cultivation of the orange, for men can hardly be expected to cultivate fruit for which there is no demand. It is only within the last two years that any anxiety has been shown to purchase the oranges of this island, except at the end of the season, when fruit has become scarce and therefore valuable. That the people of Atiu should have neglected to plant the cocoanut-palm extensively is, however, astonishing, for perishable fruits are unsuitable, inasmuch as a very moderate sea from the north or west will prevent their being shipped. With copra this would matter but little, for the cargo would receive no damage by delay. The result of this apathy or neglect is that the tribes of Atiu are about the most poverty-stricken people of the group. For this state of affairs the land tenure of the island may be in a measure responsible, as the old tribal system of New Zealand holds sway. There are but nine hundred people, and this being so it is obvious that under the most favourable circumstances this number of Polynesians could not occupy and cultivate two square miles of their island.

Mauke, Mitiaro, and Takutea belong to the Atiuans.

Mauke.

Distant from Rarotonga, 150 miles; circumference, 6 miles; height, about 60 ft.; area, 4½ square miles; population, 370.

Mauke is a low circular island about two miles across, lying to the north-east of Rarotonga. Like Mangaia and Atiu, it is surrounded by an unbroken fringing reef. It is marvellously fertile, and in value and quantity the produce exported is greater than that of Atiu; but the limit of production has not nearly been reached. Here also the "makatea," or coral zone, remains unplanted.

The value of a South Sea island can hardly be calculated by reference to the surface area, for the warm damp climate develops exceedingly active growth, whether the land be planted with cocoanuts, oranges, bananas, vanilla, or coffee. Large quantities of oranges are annually produced on Mauke.

Mitiaro.

Distant from Rarotonga, 140 miles; circumference, 5 miles; height, about 50 ft.; area, 4 square miles; population, 165.

This island is a good instance of an elevated coral reef, thinly coated with sand and gravel of the same material. The surface is not more than six feet above high-water mark, and on those rare occasions when the group is visited by a hurricane, there is but one spot on which the inhabitants can find safety, for the sea then breaks right across the island.

Copra is the only article of regular export, but in the centre of the island there is a fertile patch whereon oranges and bananas are grown with moderate success. The people live almost entirely on cocoanut and fish, and their appearance is such as to justify the Polynesian belief that no better food can be obtained for man. A few oranges are occasionally exported, but the wants of the inhabitants are supplied by the sale of some 40 tons of copra per annum. This amount might, however, be increased to 80 tons, or even more.

Takutea.

Distant from Rarotonga, 125 miles; area, 2 square miles.

This island is uninhabited, but belongs to the tribes of Atiu, who visit it for a few weeks in each year to make copra. It is a coral island, and is moderately fertile. It is probably capable of producing 100 tons of copra per annum, but at present the production is only 10 tons.

Aitutaki.

Distant from Rarotonga, 140 miles; circumference, 12 miles; height, 366 ft.; area, 7 square miles; population, 1,170.

The name includes the island anciently known as "Arahura," and some seven or eight smaller islands on the vast barrier reef. Some of these are volcanic, and would seem to have been small peaks on the lip of an extinct volcano, now submerged.

The island itself is pear-shaped, about four miles by two; its highest part (366 ft.) being situated near the centre of the enclosing triangle, with a long, low stalk curving round and joining the reef wall at the apex. This is a good illustration of an atoll in process

of formation—the highest part of the original island not yet sunk beneath the waves. Through the western sea-wall is a narrow opening, out of which the sea is always running with considerable force, for it is the only escape for the water driven over the reef on the windward side. The channel is shallow and tortuous, and is the only means of landing on the island.

Productions and Land-tenure.

Some of the best oranges in the New Zealand market, known as "Tahiti," are from Aitutaki, while the best pineapples in the Eastern Pacific are from the same place. The remaining articles of export are copra, and limejuice of very good quality. Much of the former is produced on the islets.

The land-tenure of this island leaves nothing to be desired, for the soil has been minutely subdivided and each family well provided for. All that is now required is a properly constituted land tribunal to settle questions of title.

The People.

The Aitutakians are naturally a hardy race, and industrious when away from their own homes; but on their native soil much time is taken up with disputes over succession to intestate estates.

They are said to be the best sailors in the Cook Group, and their services are much in demand for working the cargo on vessels at Tahiti. They make fans and mats, and are expert at plaiting various fibres for hatmaking. Independent and conservative, they have preserved their right to prohibit the importation of intoxicants.

Some of the inhabitants have commenced to cultivate the land, and the produce of the island has nearly doubled in the last two years, being now greatly in excess of that of any other island if calculated on the basis of population.

MANUAE AND TE AU-O-TU.

Distant from Rarotonga, 120 miles; area of Manuae, 1½ square miles; population, 10.

These two small islands are better known as the Hervey Group. They are situated about midway between Atiu and Aitutaki, and are owned by the people of the latter place, whose title is indisputable. They destroyed all of the original people except a few women, whose descendants have been admitted to have a certain claim apart from, but not superior to, the conquerers, as represented by the Arikis.

The islands have been leased to a European firm, with the result that the export of copra has risen from 36 tons in 1898 to 64 tons in 1901. During the same period the Cook Island Trading Company has planted thirty thousand young palms, and Manuae now bids fair to be the leading copra island of the Cook Group within the next ten or twelve years.

OTHER ISLANDS.

NIUE.

Distant from Rarotonga 580 miles; circumference, 40 miles; height, 200 ft.; area, about 100 or 110 square miles; population, 4,079.

Physical Features.

Niue, or Savage Island, is a long, low island, fringed with a misty cloud of fine spray caused by the breakers ceaselessly beating upon its jagged coasts. The shores being too deep and steep to support a barrier reef, the coast-line is deprived of its protection. It is fertile, and is probably three times as large as Rarotonga (being about seventeen miles in length and seven miles and a half in depth), but not more valuable. The soil is not volcanic, for the whole island is but an upheaval of coral reef, seamed and tunnelled in all directions. The coral has been more or less decomposed by atmospheric action, and the land is, therefore, fertile even where the rock is seen peeping from beneath the surface.

In consequence of the porous nature of the rock there are no streams in Niue, and fresh water is therefore very scarce. There are many deep caverns and stalactite caves, however, whence a supply of cool water is obtainable, but most of it is said to get brackish after a spell of dry weather.

Its Trade Resources.

Much of the land is encumbered with a dense scrub of guava bush, a few of these plants introduced into the island having increased and spread over large areas, from which it seems almost impossible to eradicate them.

The orange, the cocoanut, sugar-cane, cotton, and other tropical products grow well, and the lemon flourishes on the rocky shores. Notwithstanding these advantages, Niue appears to be condemned to depend almost entirely on the cocoanut for its export. The shores of the island are so precipitous that the few landing-places are not always approachable even in fine weather, and one—Mutulau—can only be negotiated when the wind is westerly, that is, during three weeks in the year. Under these circumstances perishable fruit could not be shipped successfully.

The great want of the island is a main road connecting all the villages with Alofi. Unfortunately, there are difficulties in this matter, it being necessary to blast out the face of a cliff if Mutulau is to be connected with the chief town. Without good roads Niue can never make the most of its natural fertility, for at the present time most of the produce is carried on men's backs; and as the fixed price of labour at Niue is 4s. per diem, it would cost £6 per ton to carry copra from Mutulau to Alofi.

The People.

On account of their isolation, the natives of Niue are somewhat different in character from other Polynesians. They are very industrious, and the men are often engaged at Tonga and elsewhere as labourers. The girls and women plait hats, which are exported to New Zealand and Australia. They are keen traders, but are much averse to strangers obtaining a foothold in the island itself.

[A fuller and more special description of this island by Mr. S. Percy Smith, who acted as Special Commissioner for several months, will be found in the Year-book for 1902.]

Palmerston Atoll.

Distant from Rarotonga, 273 miles; area, 1 square mile; population, 115.

The Palmerstons are situated upon an irregular ring of coral reef, measuring outside about four miles and a half by two miles and a half, just awash with the tide. This narrow ring is about half a mile in width, and it supports eight little islets, nearly all covered with cocoanut palms. The largest of these is little more than half a mile in length and about a quarter of a mile wide. Under its grove of palms is the settlement of the entire population of the group. The lagoon and reef abound with fish, and turtles are caught in plenty.

The group is leased to the family of the late William Masters, an old sailor from one of the Midland Counties, who was one of the first to plant the islets with the cocoanut palm. The lagoon is large, but does not produce pearl-shell; though it seems possible that if spawn were introduced it might thrive.

Copra is the only article of export, and this product is likely to increase in quantity, for the Masters family is still planting the waste lands and thinning out the palms where they have been too thickly planted.

Penrhyn.

Distant 735 miles from Rarotonga; area, 3 square miles; population, 445.

This atoll is known to the Polynesians under the names of Tongareva or Ma-ngaro-ngaro, and is valuable only by reason of the existence of pearl-shell beds in the extensive lagoon, which has a surface area of not less than a hundred square miles. The extent and value of these shell-beds is only imperfectly known, for the native population is small, and they do no more work than will provide them with food and clothing. It is not possible to do more than estimate the yield of shell, but it is safe to say that not less than 70 tons is annually exported, and that the value is probably £200 per ton.

The cocoanut crop is small, though there are many trees on the long strip of coral sand that separates the ocean from the lagoon.

The soil of Penrhyn does not apparently suit the cocoanut palm, or it may be, as the natives assert, that the rats destroy the young nuts. Whatever the cause, not more than 15 tons of copra is annually produced by this atoll.

Fresh water is very scarce at Penrhyn.

Suwarrow.

Distant from Rarotonga, 530 miles; area, ½ square mile; population, 30.

Suwarrow is an atoll with a splendid lagoon. The entrance will admit of vessels drawing from 15 ft. to 20 ft. of water passing through, and the lagoon itself forms an excellent harbour. The atoll is under lease to the Pacific Trading Company, but its only value is the lagoon, which produces a very good class of pearl-shell, taken by the aid of diving-dresses in water averaging from 20 to 28 fathoms in depth. The present yield of shell is nearly 50 tons per annum, but the beds are about to be given a long rest.

In October, 1901, there were about forty persons on the island, natives of Manahiki or Tahiti, but it is doubtful if there has ever been an indigenous or native population, for the islets of the reef are small, and no old cocoanut palms are to be seen.

The copra made on Suwarrow does not exceed 6 tons per annum, as many nuts are used by the pearl-shell fishers, and on several of the islets the trees are too young to bear fruit.

Manahiki and Rakahanga.

Distant from Rarotonga, 650 and 670 miles respectively; area, each 2 square miles: population, Manakihi, 484; Rakahanga, 400.

Manahiki, or Humphrey, is nearly circular, but there is no opening large enough for a boat to pass into the lagoon. The people are amiable and industrious, and are expert swimmers, as indeed are all the South Sea Islanders. Beche-de-mer is obtained from the lagoon. The island occasionally suffers from drought.

Rakahanga, or Rierson, is also an atoll. The inhabitants are much like those of Manahiki, and are happy and contented. Turtle are plentiful round the reef.

These islands may be treated as one, for they are not more than twenty-five miles apart, and belong to the same people, who are governed by two Arikis. The former has until lately produced a limited amount of pearl-shell, but about the end of 1900 it was found that the beds were exhausted by over-fishing. The lagoon was therefore closed to give it a much needed rest.

The only industry is now that of copra-making. Both islands are overplanted—indeed the yield of nuts would be greatly increased if three out of every four trees were cut down.

Pukapuka, or Danger Island, and Nassau.

Pukapuka is a small solitary atoll about three miles in diameter, which produces pearl-shell. It is about seven hundred miles from Rarotonga, and has an area of two square miles. The population is 505 persons.

Nassau is also a small island within the extended boundaries. It is said to be uninhabited.

EDUCATION.

The education of the children living in the Cook Group is in the hands of the London Mission Society, a non-sectarian but Protestant association, which provides some one thousand eight hundred children in the Cook and Northern Islands with a sound and useful education. At Tereora, in Rarotonga, there is a very useful institution at which the mission supplies an English education for the children of those leading men that are willing to pay a small fee per annum. At the present time there are forty children at Tereora under a qualified teacher, and in aid of this establishment a subsidy of £2 10s. per head is paid by the Islands Government. The school is capably managed, and it is a rule of the mission that the boys shall raise their own vegetable food.

In Mangaia there has until lately been a school of the Tereora type under a European lady, and it will probably resume operations when the new missionary arrives to take charge of that island.

At Aitutaki the natives have built a very fine schoolhouse, and a certificated teacher is now (February, 1902) on his way from England to take up the training of the children of that island.

To sum the educational work now being done by the London Mission Society: 1,575 children are being taught to read and write Maori, 250 are receiving an elementary English education, and forty are receiving a Fifth Standard education. To the above must be added the good work done by the Sisters of St. Joseph, a Roman Catholic institution of French and Irish ladies, who have established themselves in Rarotonga, and have perhaps fifty pupils, drawn from all the denominations and nationalities to be found in the South Seas.

FUTURE TRADE PROSPECTS.

Oranges and bananas have heretofore been the chief exports; but for some years past have barely cleared expenses during the months of May, June, July, and August, though there have occasionally been fair returns for the remaining four months of the orange season. Not only is there no improvement, but the trade is slowly and surely becoming less remunerative, owing to the competition of Tahiti, Tonga, Fiji, Samoa, and New South Wales, and will shortly reach the point at which export must cease. The Tahiti orange competes with that of Rarotonga on equal terms, although prohibitive duties are imposed at Tahiti on all goods or produce from places outside the French sphere of influence. So

also the oranges of New South Wales are admitted free to New Zealand, though the coffee and limejuice from the islands is prohibited in Australia by the Federal tariff. That the islands could, if necessary, supply all New Zealand with bananas seems quite certain, and during the past twelve months hundreds of acres have been planted with this object in view; but the competition of Fiji and the expenses of shipping have put an end to any hope of expansion of this export.

As regards coffee, there is no market in New Zealand, for since the duty on that article was removed the colony has been flooded with an inferior bean from Costa Rica that can be sold more cheaply. Hence only the market of Tahiti is open, and there the duty is approximately 31 per cent. of the selling-value. Under these circumstances dependence can only be placed on copra, and even this industry is not capable of immediate expansion. The planting of the cocoanut-palm has been neglected for many years, and eight years more must elapse before any benefit can be derived from the trees lately planted.

Throughout the Eastern Pacific it will be noticed that all the cocoanut-palms are from sixty to eighty years' growth. Young trees may be seen of from two to five years, but half-grown trees seldom, if ever. The result of this, in the event of a real hurricane, will be that all of the old and partially worn-out trees will be uprooted, and many of the islands will have no export worth mentioning for the ensuing ten years.

The following statement will show the present and estimated possible yield of copra and the yield of pearl-shell for each island:—

	Copra.		Pearl-shell.
	Present Production. Tons.	Estimated Possible Production. Tons.	Present Production. Tons.
Rarotonga	150	2,000	..
Mangaia	150	500	..
Atiu	125	1,800	..
Mauke	160	350	..
Mitiaro	40	80	..
Takutea	10	100	..
Aitutaki	350	450	..
Manuae	60	400	..
Niue	500	3,500	..
Palmerston	100	180	50
Penrhyn	15	100	70
Suwarrow	25	100	..
Manahiki	100	200	10
Rakahanga	100	200	..
Pukapuka	100	200	..

The Chili Dollar.

With reference to this unsatisfactory coinage, it is reported that the natives of the group have refused to accept the dollar in pay-

ment for island produce. The result of this action has been most satisfactory, for both Mangaia and Aitutaki have banished the Chili dollar and have replaced it with British coin. In Rarotonga, which is the trade centre of the Cook Islands, it has not yet been abolished, but most of the business is now transacted with British money. The trade of Penrhyn, Manahiki, and Rakahanga is still in the hands of Tahiti firms, with whom the Chili dollar is the only medium of exchange. The dollar is at present worth about 1s. 9d. in English money.

MAORI SOCIOLOGY.

[By Elsdon Best.]

This little article will give some account of the social organization and life of the Maori people of New Zealand, as known to have obtained among them prior to the advent of Europeans.

The Maori people, like others in a similar culture-stage, were ever incapable of forming themselves into a nation, of combining for the purpose of advancing the public weal, except in the case of single tribes, the members of which would unite to present a front when threatened by a common enemy. These Natives formed themselves into tribes. Each tribe would be the descendants of a common ancestor, whose name the tribe usually took as a tribal name, though not so in all cases. Each of these tribes was subdivided into clans or sub-tribes, and these again into what may be termed the "gens" or family group. Observe, the unit of Maori social life appears to have been neither the individual, nor yet the family, but the family group. This will be noted when we survey their social customs and consanguineous nomenclature.

There was not a great deal of cohesion among the various clans of a tribe, except in case of war. Indeed these clans, or sub-tribes, often fought fiercely among themselves, one against the other. As a rule the people lived in fortified places, the defensive works thereof consisting of earthworks, ditches, escarpments, and palisading. Such a fort would be occupied by a family group, or a clan, or in some cases by several clans, in which latter case it often occurred that the fortified area would be subdivided by means of earthworks and palisades, as between the different clans, in case of inter-clan fighting.

From these forts they would issue forth each day in order to perform various necessary labours, as the cultivation of their crops, fishing, hunting, &c., each clan and each family group cultivating, or hunting over, only such lands as lay within their own boundaries. These boundaries were clearly defined, and trespass for the purpose of hunting, fishing, or cultivation, or the collection of any of the products of the land of another branch of the tribe, would at once be taken as a *casus belli*.

In time of war each clan would gather under its own chiefs, and all clans would assemble at a common rendezvous in order to march against the tribal enemies, or await their attack. In expeditions against other tribes, each clan pleased itself as to whether or not it took part in the foray. Unless the whole of the clans agreed to place themselves beneath the command of a famous war chief, or fighting priest, there was often much bickering, jealousy, and want of cohesion among the various clans, with consequent loss of fighting power.

During the long nights the Natives would collect in large houses within these forts, and amuse themselves by singing, posture dancing, the relation of their ancient racial myths and folk-lore, together with various games of skill. The kite, the whip-top, and the humming-top are ancient Maori toys.

Social etiquette was a strong point among these neolithic people, who were most punctilious in their observance of the numberless rules pertaining thereto; indeed a breach of such might lead to severe and prolonged fighting. The Maori is naturally of a dignified demeanour and a born orator.

The people may be said to have been divided into three principal classes—(1) the chiefs (although various grades of such existed), (2) the common people, (3) slaves.

The chiefs and priests were the influential persons of the tribe, and the first-born of a high chief's family was a most important person, and was also endowed with a great amount of *tapu*. His, or her, prestige was great, and such first-born were considered to be imbued with considerable power of a supernatural nature. Primogeniture was ever an active and a powerful force in Maoridom. The priests and chiefs were the repository of the unwritten archives of the tribe. They preserved, and taught to carefully selected youths, the tribal history, mythology, ritual, &c., which were thus conserved orally from generation to generation. But every individual, even commoners, had much to learn, as land-boundaries, the genealogy of his family, and numerous charms, invocations, &c., for many purposes.

As observed, the family group was practically the social unit. Hence we note, in the consanguineous nomenclature of these people, that such terms as "father," "mother," "sister," and "brother," have not the same restricted meaning as they have with us. The term *papa* means father, also uncle, &c. The word for mother (*whaea*) also denotes aunts, &c. *Tuahine*—a sister—is also used to describe a female cousin, and so on.

There was, and is, no family life, as we know it, among the Maori people. The relations between parents and children are also totally different. Brothers and sisters, &c., of the parents would appear to have as much say in matters affecting the children as have the true parents, indeed often much more. The Maori family is by no means cohesive. The family group, or sub-clan, is much more so.

In regard to marriage, such matters were often arranged (and are still) by the uncles and aunts of a girl, the parents taking little or no part therein. The marriage of near relatives, such as first cousins, was abhorred, and looked upon as incest, for such cousins are termed brothers and sisters, in accordance with the native conception of the social unit. Thus the Maori was exogamous as regards the family group, or gens, but usually endogamous in regard to the tribe; usually, but not always so. Marriages with members of other tribes, and also with slaves, were by no means uncommon. Children of a slave mother by a free man would themselves be free, and be looked upon as members of the tribe. The taint of such an origin would, however, run down the generations.

When a man died, his younger brother often married the widow, and it was considered the correct thing so to do.

Children were often adopted by their aunts, or more distant relatives; nor does the change appear to grieve them as a rule. Children are very seldom chastised among the Natives, nor, to give them due credit, do they appear to need it.

Some most singular customs obtained respecting birth. When a woman of rank was in childbed for the first time, she became intensely *tapu*, and was not allowed to remain in the village, nor in a house. She was taken away from the village, and a rude shed, termed the "fœtus house," was built for her reception, where she remained with one attendant until the child was about two days old—*i.e.*, when the *tua* rite had been performed over it by the priest, and the *tapu* lifted from mother and child.

Both birth and death were sacred matters to the Maori, and neither were allowed to take place in the houses of the people, but the woman, or invalid, as the case might be, was taken away outside the fort or village, and a rough shelter provided for them. Forts stained with the blood of the defenders thereof shed in battle were often deserted on account of being thus rendered *tapu*, and new ones built elsewhere. Should a person chance to die in a dwelling-place, that house must be deserted. The sacredness of death is upon it. It must, however, be observed, that the term *tapu* in many of these cases should rather be taken as meaning "unclean" than "sacred."

When, in former times, a chief was near his end, he would call his people around him, and proceed to make a last speech to them, urging them to preserve their tribal unity, to be strenuous in avenging all insults and injuries which he had not already equalised, and to uphold the tribal dignity in all ways. After which he would bid them farewell, and proceed to die without loss of time.

On the death of a person, preparations are made for a funeral feast, to which many come, and lamentations, speech-making and feasting last for several days, during which the corpse, in olden times, lay in state, surrounded by his fine garments and weapons.

Related peoples among other tribes will often form a mourning-party and march long distances in order to wail over a person, or

persons, who have been dead and buried for years. These singular mourning-rites are really much enjoyed by the Natives. Their grief does not prevent them from having a thoroughly good time. It may be remarked that the sick are shown but little attention; care and solicitude for such are not prominent traits in the Maori character. But as soon as death ensues, then the most extravagant protestations of grief are made. That is, to the Maori mind, the only way of avenging a natural death. For what says the Maori orator? "By tears and lamentations alone may the stroke of misfortune be avenged."

In Maoridom, when visitors are being received, great outcry is made, waving of garments, loud wailing cries of welcome, as the challengers fall back on the homestead. Then follows a prolonged scene of weeping, the two parties standing in two closely-arranged masses opposite to each other. After this comes speech-making and feasting, cooked food being borne to the guests by a procession of people, who sing loudly as they advance.

But when a party is leaving a village, no such demonstration is made, excepting a few cries of farewell.

Feasts are given by a tribe, or clan, at intervals, to which many people are invited and at which, in former times, some very singular rites were performed. At such meetings matters affecting the tribe are discussed.

Such were some of the social rules and customs of the old-time Maori, and many of them are still in force at this day. Many other items remain to be noted, and these we will treat of in the years that lie before.

PART IV.—DESCRIPTIONS OF LAND DISTRICTS.

THE AUCKLAND LAND DISTRICT.

G. MUELLER, Chief Surveyor.

Introductory.

THE Auckland Land District covers about four and a half degrees of latitude, with an area of 13,858,000 acres, extending from 34° 30′ to 39° S., its greatest length being about 365 miles, from the North Cape to the 39th parallel, south of Lake Taupo, while its greatest width is about 180 miles. In the peninsula north of Auckland, indented as it is on either side by harbours and arms of the sea, and with a mean width between the Pacific Ocean and Tasman Sea of little over forty miles, the range of temperature is remarkably small. The thermometer seldom registers above 80° in the shade in the middle of summer, whilst the heat is always tempered by a cool breeze, bringing the mean summer temperature to under 70° in the shade. The frosts are hardly worth mentioning, as the minimum register is seldom below 40°; but south of Auckland sharp white frosts occur very often, more especially beyond 38° of latitude, and snow lies upon the summits of some of the highest hills or mountains in winter.

Physical Features.

This land district may be said to have no real mountains, as the most prominent peaks of the several scattered ranges or hills seldom exceed 3,000 ft. in height above the sea-level, an altitude just enough—south of 38°—to clothe the last 1,000 ft. with snow in the depth of winter. North of Hokianga and the Bay of Islands there is one well-defined range of hills rising to a height of 2,463 ft.; whilst south of these places, and extending to the Wairoa River on one side and the Whangarei Harbour upon the other, the country is all more or less broken into ranges from 1,000 ft. to 2,000 ft. in height, with valleys between. The next really well developed main range lies within the Coromandel and Thames Peninsula. With a length of over 150 miles, it has an average height of over 2,800 ft., commencing with Moehau, or Cape Colville, 2,935 ft.; next, Te Aroha, a peak of 3,176 ft.; and ending at Weraiti with a height of 2,527 ft. There are two other well-defined ranges—namely, Tawairoa and Hauturu—lying between the West Coast and the Waipa basin, with their highest peak at Pirongia, which rises to 3,156 ft., and is often snow-capped. There are other ranges forming the watershed between the basins of the Waikato and Waipa Rivers, and dividing both from the streams running into the western side of Lake Taupo. Their highest peak is Pureora, rising to 3,793 ft. The eastern side of the land district is occupied by a very broken, forest-clad country, known as the Urewera country, the average height of which is about 2,500 ft. It is practically unexplored, and, being still in the hands of the Natives, is not as yet available for settlement. To the east of Lake Taupo lie the Kaimanawa Ranges, of about 4,500 ft., and generally open on the ridges, with valleys clothed in beech forests. Nearly the whole of the Auckland Land District is indented on both coasts with harbours and arms of the sea, forming a cheap and easy means of access. Of rivers, properly so called, there are only two of any great length—namely, the Wairoa and Waikato. The first empties itself into the Kaipara Harbour, a large arm, or rather succession of arms, of the sea, giving hundreds of miles of inland water-carriage to all parts of the Counties of Hobson, Otamatea, Rodney, and Waitemata. This river is navigable from its mouth to its junction with its

tributaries Wairua and Mangakahia, a distance of ninety-one miles from the sea, and for forty miles it is navigable for ships of large burden. The River Waikato has a course of 200 miles, measured from its source in the Ruapehu Mountain through Lake Taupo to the sea on the West Coast. It is navigable for river-steamers for seventy-five miles from its mouth, and its tributary, the Waipa, for twenty miles from its confluence with the Waikato at Ngaruawahia. Another river —the Thames, or Waihou—though of no great length, affords a valuable means of inland water-carriage, and is navigable for small steamers for twenty-five miles. Generally speaking, every part of the district has an abundant water-supply, now and then lessened for a short time at the end of a very dry summer.

Plains.

Of plains proper, this district has only the stretch of country called Kaingaroa, extending from the eastern side of Lake Taupo towards the Bay of Plenty, all more or less of a pumice formation; the valley of the Thames, and the delta between the Thames and Piako Rivers, which is generally level, the quality of the soil varying very much in different parts; and the Central Waikato basin, already thickly settled. Here and there in the North there are level plateaux of volcanic soil, more or less densely wooded, and along the main rivers there are stretches of level country, but there are no large plains of alluvial soil such as the Middle Island can show.

Lakes.

Of these, which add so much to the scenery of a country, this district possesses a fair share, there being eight principal lakes, with some twenty or more smaller ones. To the north of Auckland, in the Bay of Islands district, there is only one lake of any size, called Omapere, three miles by two miles, an old crater. In the Waikato are Lakes Waikare and Whangape, the first six miles and a half long by three miles across, and the second five miles by one mile. These lakes are generally covered with numerous wild swans and ducks, and, being both connected with the Waikato River by navigable creeks, form a convenient waterway for transport of goods to settlers living around their shores. All the remaining lakes of large size are within the watershed of the Thermal-springs District, and are mostly from seven to eight miles long, and from three to six miles wide, except Taupo Moana, the queen of the North Island lakes, which is twenty-five miles long and eighteen miles broad, with a depth of 500 ft. The scenery round its western shore is of the most romantic kind.

Forests.

The greater part of the Auckland Land District has been covered in the past with dense forests, which are now fast disappearing under the axe of the settler and being transformed into rich pasture-land. The only really good Crown lands fit for settlement in the North are still all covered with forest, and must be cleared and sown before any returns can follow. The area of forest land in the Auckland District at the present time is about 1,800,000 acres north of Auckland, and 3,420,000 acres south of it. The forests contain a mixture of trees of all kinds, from the giant kauri to scrubby tea-tree or manuka, but all the bush is useful for buliding, fencing, and household purposes, or at any rate may be converted into charcoal for sale. Of kauri (the most valuable tree in New Zealand) great quantities, worth as much as £1,000,000 per annum, are being yearly cut, and exported or use for home consumption. To give some idea of the size of these trees, and the amount of timber contained in them, it is estimated that upon the Crown lands in the Auckland Land District there are still remaining 1,185,000,000 ft., of a value, as the timber stands, of over a million sterling.

Soils.

With respect to the soils of Auckland, nowhere in New Zealand within such short distances is there such a diversity in the quality—a distance of half a mile often makes all the difference between rich alluvial and barren pipeclay. To the north of the Bay of Islands and Hokianga the lands are chiefly clay and sandstone, with here and there a volcanic area intervening. In and about the valley

of the Mangonuiowae River, in the Hokianga County, there is some of the richest alluvial soil in the district; and, taking the whole Crown land remaining to the north of a line between the Hokianga and Bay of Islands Harbours, the really available good land fit for settlement would be about 40,000 acres. There are large areas outside of this which will carry good grass and feed one or two sheep to the acre, after clearing and laying down in grass; and there is also land highly suitable for fruit-growing. South of Hokianga, and between that place and the Wairoa River, the soil is, generally speaking, very good, being both volcanic and alluvial. Here the Crown has probably 150,000 acres of such land fit for settlement. Immediately south of the Bay of Islands, and extending thence to Whangarei, the soil is, for the most part, clay lying upon sandstone or marl, with alluvial flats in the bottoms of the valleys; but these are, as a rule, very narrow. Within the Puhipuhi State Forest there is an area, say, of 16,000 acres, more or less, of volcanic soil. Approaching Whangarei, at Hikurangi, the limestone crops out, overlying coal-deposits, and round Whangarei itself the soil becomes a rich volcanic, in a high state of cultivation. South of Whangarei Harbour, and from thence to Auckland, the Crown lands generally are of a broken character, with soil varying from alluvial swamps—as in the case of the Tokatoka Swamp of 16,000 acres- to the limestone areas round Maungaturoto, the sandstone and clay lands of Rodney County, and the poorer clay lands lying north of the City of Auckland, which have, however, proved eminently suitable for fruit-growing.

For about 200 miles south of Auckland the land (with the exception of the Cape Colville Ranges) is, generally speaking, far less broken, and gradually opens out into large tracts of level country in the Waikato and Waipa basins. Immediately south of Auckland the soil is rich volcanic until it is gradually superseded by the prevailing clays; the greater portion of Manukau County, for thirty miles south of Auckland, may be classed as pastoral, and is under occupation as such. The Crown areas available for settlement—say, 16,000 acres—are chiefly in the Otau Parish, varying from volcanic clay to ordinary clay land, forest-clad, and well adapted for pastoral purposes. In the Counties of Waikato, Raglan, Waipa, Piako, West Taupo, and Kawhia, there is a still greater diversity of soils; Raglan County contains large areas of good limestone country, broken, but with rich black soil, and carrying most luxuriant grass. The lower Waikato country consists of clay soil and extensive swamps, almost undrainable, but at a distance of eighty miles from Auckland is found a flat and undulating country, lying partly within the Waikato and Waipa basins, and partly within the valleys of the Piako and Waihou Rivers, formed mainly of alluvial deposits of rhyolite sands brought down from the volcanic districts. In the Kawhia County there are some 300,000 acres of excellent limestone land, a large portion of which is heavily timbered, with numerous warm valleys. Most of this land has now been acquired by the Government from the Native owners, and is being opened for settlement. Beyond this there is a large stretch of country consisting alternately of open valleys and forest-clad hills, a fair proportion of which is good land, both pastoral and agricultural. The County of Coromandel, with portions of Thames and Ohinemuri Counties, is chiefly devoted to the mining industry. The soil is nearly all clay, the land very broken, but suitable for pastoral purposes if cleared of the dense forest that now covers it. The western portion, however, of the Thames and Ohinemuri Counties contain large areas of alluvial and swamp lands, now in the hands of the Crown, but, through want of drainage, not yet available for settlement.

In the County of Tauranga, the clay lands extend from Te Aroha Mountain to Katikati entrance, changing, near Tauranga, to sandstone and black pumice soil of rich character, which improves towards Te Puke and Maketu, where the land is all good, and more or less volcanic. In Whakatane and Opotiki Counties there are very extensive swamps, of which large portions are drainable, and back from the coast seven miles or so are large areas of Crown lands, broken and forest-covered, opened ready for settlement. The soil is chiefly clay or light loam, with alluvial flats in the valleys, and all well watered. This kind of country extends to the boundary of the land district. The coastal lands are nearly all alluvial flats in a high state of cultivation, and the settlers mostly well-to-do.

Review of Soils: Uses and Returns.

Briefly to set forth the capabilities of the Crown lands in the district, it wil suffice to say that north of the Bay of Islands and Hokianga the land is suitable chiefly for two classes of persons—the gum-digger, and the fruit-grower or small farmer. The former has the range over large areas of Crown lands upon paying a small fee, and his earnings average from 5s. to 10s. a day. As for the latter, in and around Hokianga, with its 250 miles of water-frontage, almost anything can be grown, from the tropical banana to the more prosaic potato, whilst oranges and lemons flourish side by side with all kinds of apples, pears, and plums. Wheat does fairly well, and maize gives a return of 50 to 60 bushels an acre. Sheep also thrive; and most of the lands, when properly grassed with artificial grasses, will carry two or three sheep to an acre, but ordinary rough-grassed lands only one and a half to two sheep per acre. The Messrs. Williams, at Pakaraka, are feeding four sheep to the acre upon land sown with furze. The clearing of forest lands, ring-fencing and grassing them, will cost about £3 to £3 10s. per acre. The same remarks apply to the Bay of Islands and Whangarei, and to the country as far south as Auckland. Round about Whangarei district, and under similar conditions of culture, the average return for good agricultural or pastoral lands might reach 12s. an acre per annum. South of Auckland, throughout the Waikato, Piako, Waipa, and Raglan Counties, and thence south to the district boundaries, the land is both agricultural and pastoral. All the cereals do well, wheat averaging 27 to 30 and up to 40 bushels per acre, and oats 26 bushels per acre. Potatoes average from 5 to 7 tons per acre. Dairy-farming is carried on, yielding (upon well-cultivated farms) a net profit of 15s. to 20s. an acre per annum; whilst sheep-farming yields a profit of from 5s. to 7s. 6d. a sheep per annum on very large estates; allowing for greater losses from disease, &c., the average return would still be 4s. per sheep. The cost of clearing fern and scrub is generally from 7s. to 10s. an acre, and laying down fern land by surface-sowing and harrowing, about 17s. an acre.

The seaward counties of Tauranga, Whakatane, and Opotiki are both agricultural and pastoral, growing wheat and maize alike to perfection. In fact, these counties, upon their alluvial shores and uplands, grow the greater portion of the maize produced in the district, and from the ports of Whakatane and Opotiki in one year some 34,000 sacks have been exported. In these counties the average yield of wheat is from 22 to 25 bushels per acre, oats about 29 bushels per acre, and maize 45 to 60 bushels per acre. It is quite possible within this district to select land early in the winter, fell and burn off by the ensuing summer, sow in grass in the autumn, and put on stock within twelve months from selection.

Rainfall.

The rainfall during the year averages about 39 in., the greater portion of which, as a rule, falls between the 1st of May and 1st of November, or during the winter and spring months. Owing to the constant changes of wind, caused by the configuration of the coast-line, the shortness of the distance between the two coasts, and the influence, greater or less, of the trade-winds, it is quite common for one neighbourhood to have double the rainfall of another, even though the two be only twenty miles apart. Droughts of more than a couple of months are practically unknown, and grass is always abundant.

Winds.

One of the chief means whereby the great healthiness of the climate is maintained is the constant presence of fine breezes, blowing both summer and winter, the prevailing winds being north-east and south-west, and very seldom passing into really heavy gales. In the middle of summer, the sea-breeze during the day and the land-breeze at night are almost unvarying.

General Products and Industries.

Timber.—The vast forests of kauri and other valuable trees have given this district the foremost place for production and export of timber. There are many

safe and sheltered harbours for shipping, while streams and rivers without number form convenient highways for conveying logs to the mills or ports. Some idea of the extent of this industry may be given by quoting from the official returns made at the time of census of 1901. There were then forty-eight sawmills situated in various parts of the district, with engines of a total of some 3,100-horse power. These mills employed over 2,000 men, and produced yearly some 109,000,000 ft. of sawn timber, valued at £459,128; of timber resawn into flooring, skirting, &c., some 14,000,000 ft., valued at upwards of £79,000, not to mention posts and rails, mouldings, sashes, and doors. Besides this output, in the remoter parts of the district large quantities of timber are hand-sawn. The durable puriri is converted into railway-sleepers, for which there is a great demand, and the totara is largely sought after for telegraph-posts and wharf-piles.

Kauri-gum.—The most unique production of this portion of the colony is kauri-gum, obtained for the most part from the country north of Auckland. It is formed by the hardening of the exuded turpentine from the kauri tree, and is dug out of ground from which the forest has been burnt off. The Royal Commission appointed in 1893 elicited the fact that the procuring of the gum gave employment then to no less than 6,897 persons. Last year 7,430 tons were exported, valued at £450,223. The kauri-gum is extensively used in the manufacture of varnish, and also for glazing calico. Nearly two-thirds of the varnishes in the market are produced from this gum. The average earnings of a digger may be taken as from £1 7s. to £1 10s. per week.

Flax (Phormium tenax).—An industry, which has assumed large proportions, is the conversion of the broad leaves of the *Phormium tenax* into marketable flax suitable for the manufacture of rope, twine, mats, mattresses, and numerous other articles. The flax-mills are scattered over different parts of the district, as near rail or water carriage as possible, and employ a considerable number of men and boys, whilst the local rope and twine works give work to a good many more. The export from Auckland Land District of phormium for the year 1902–1903 was 4,105 tons, valued at £111,091.

Gold.—This district has in the past produced large quantities of gold, but the area over which auriferous quartz-reefs has been discovered is limited to the Counties of Coromandel, Thames, Ohinemuri, and a small portion of Piako. In 1902–1903 the output of this neighbourhood was 39 per cent. of all the gold produced in New Zealand. The total estimated value of the gold was £724,892 for 1902–1903. All the gold won was obtained by battery amalgamation and the cyanide process. There is a large amount of English capital being expended in developing new discoveries in out-districts away from the goldfield, but it will be some time yet before these discoveries have reached their full development. At the Thames there is a School of Mines, well attended and showing good results.

Coal.—Coal is found in most parts of this district, and is being worked with more or less success at Kawakawa, Hikurangi, Kamo, and Ngunguru, to the north of Auckland; whilst in the south there are three mines at Huntly, all turning out a good household coal.

Fruit.—The climate of the Auckland District is well adapted for the growth of the orange, lemon, vine, and olive, as also for the fruits of England, America, and Japan. The subtropical kinds flourish about Hokianga, in the north; those of the temperate regions, in the Waikato and neighbourhood. Now that the problem of how to land fruit in good condition in the London market has been solved, orchard planting is rapidly progressing, and it has been found that the culture of the hard varieties of the apple will repay export to England. Of late years a demand has set in for the poor clay land that used to contain gum, as it is admirably suited for fruit-growing. Orchards are now planted in neighbourhoods where the soil has lain idle for years, for it has been proved that apples grown on this poor soil keep longer than those grown on richer land. What can be done by cultivation and care on poor lands is evidenced at the Waerenga Government Experimental Plantation in the Waikato, where the two orchards of fruit trees and vines show most luxuriant growth. More attention is being just now paid to stone fruits, for which there is always a steady local market, than to apples, which have of late years been heavily

handicapped by blight. The fruit industry in Auckland is yet in its infancy, and is capable of great extension. At present peaches are the only fruit canned, though there is also a good deal done in the way of drying fruits and vegetables by the process of evaporation.

Fishing.—The sea and harbours abound in fish. At least eighteen different varieties suitable for the table are caught with little labour, and settlers living near the sea-coast or any one of the many harbours and tidal rivers can always obtain enough for all necessities. At present the canning industry is confined to mullet, of which there is a large amount exported, and an equal quantity used for home consumption. The rock-oyster is found over a large area on these coasts, and large quantities are sent both to the southern ports of the colony and also to Australia.

Chief Centres and Surrounding Districts.

The City of Auckland lies on the southern shore of the Waitemata Harbour, one of the finest havens in the colony, on a narrow neck of land between the Waitemata and the Manukau. Alike from the sea and from the neighbouring hills the city and surrounding country present a charming picture. Especially fine is the view from Mount Eden, a low volcanic hill in the suburbs. Facing the town are the green hills and white houses of the North Shore, and the remarkable island peak of Rangitoto; beyond lie the many islands of the Hauraki Gulf, with the blue hills of Coromandel and the Great Barrier in the far distance. Clustered near the foot of the hill, and scattered for many miles to the southward, are charming villa-like houses, with tasteful gardens and shrubberies, while to the north-west the view is closed by high wooded ranges. The city has an excellent commercial position; it has communication by sea with both sides of the Island, while the Kaipara and Wairoa Rivers leading far into the northern peninsula, and to the south the Waikato and Thames Rivers leading into the heart of the Island, give it natural facilities for inland communication. In March, 1901, the population of the city and suburbs amounted to 67,226 persons. The city is well supplied with gas and water, and amongst public buildings may be noticed Government House, the new Government Offices, Post and Telegraph Offices, Supreme Court, &c. There is a Free Public Library and Art Gallery, and a good Museum, containing what is probably the best Maori collection in the world. The Auckland University College is affiliated to the New Zealand University. The Victoria Arcade, the Exchange, Harbour Board Offices, hotels and clubs, as well as many commercial buildings, compare favourably with those in other parts of the colony. There are admirable recreation-grounds, including the Government Domain of about 180 acres, as well as the Botanic Garden and the Albert Park in the centre of the city. There is an electric tramway system extending through the suburbs. Auckland has numerous industries, including, amongst others, ship-building, sugar-refining, timber-converting, sash and door manufactories; rope and twine, pottery, brick and tile, and varnish works; printing-offices, &c.

The City of Auckland is the centre from which radiate all railways, road, and steamer routes. From it, by rail, lies the way to all Crown lands south of the Waitemata, while the Kaipara Railway connects it with the country north of Helensville. All lands to the north and along the Bay of Plenty are reached from its wharves by the Northern Company's steamers. The chief centres to the north are:—

Warkworth, on the East Coast, forty miles from Auckland, with communication by coach and steamer nearly every day. It is a thriving township, with post and telegraph office, public halls, hotels, &c. It is also the site of important hydraulic-lime and cement works. A good deal of agricultural and pastoral farming is carried on in its neighbourhood.

On the West Coast an important centre is Helensville, on the Kaipara Harbour, distant thirty-eight miles from Auckland, with which it is connected by rail. It has all the conveniences required by travellers in the shape of good hotels, stores, &c., and is the starting-point of the river-steamers running to all places in the Otamatea and Hobson Counties. It is also one of the main centres for the export of balk timber.

North of Helensville the railway has been opened to Ahuroa, fifty-seven miles from Auckland. The line is under construction to Hotea, and will eventually be carried on to Maungaturoto.

Dargaville, on the Wairoa River, is a town of about 500 inhabitants, with all conveniences for travellers. It may be reached by rail and steamer from Auckland three times a week. Dargaville is the starting-point of the Kaihu Valley Railway, which is open for traffic for seventeen miles from the town, and from the terminus of the railway all the Crown lands in the neighbourhood are reached, even so far north as Hokianga. The town is also the centre of a very large timber export. There are only two townships on the west of any importance north of Dargaville—Port Rawene, or Hokianga, and Kohukohu, about four miles further up. Both have post and telegraph stations, and comfortable hotels, with fortnightly steam-communication from Auckland.

Whangarei, on the East Coast, is distant seventy-five miles from Auckland, with which it has steam-communication twice a week. The town is a thriving and important place, having a population of about 1,500, and is the centre of a large agricultural and pastoral country. In the neighbourhood is also a large coal-bearing and gum-producing district, while the export of oranges and lemons, which thrive magnificently on the rich volcanic soil, is on the increase. From here, all lands within a radius of thirty to forty miles may be visited by horse, carriage, or rail. Opau Wharf, about three miles south of Whangarei, is the present commencing point of the railway-line passing through Whangarei and Kamo to Hukerenui, a distance of about twenty-three miles. This line will ultimately join that now being constructed in a southerly direction from Kawakawa. A bridge is also being built over the Whangarei River, in order that the railway may be extended from Opau Wharf to deep water at Grahamsfern, three miles distant.

Kawakawa, at the head of the tidal portion of the river of the same name, is connected by a short railway-line with Opua, the calling-place of steamers from Auckland. Kawakawa possesses good inns. From it coaches run weekly to Hokianga and Whangarei. It is the centre of a coal and gum industry, and a port of lading for those products. The old town of Russell is situated further down the bay, and has a good hotel, besides having a post and telegraph office. To Whangaroa, Mangonui, Awanui, Hohoura, and Parengarenga the Northern Company's steamers run every week. Whangaroa is famed for its exquisite scenery, and is the centre of a large timber and gum export trade. Mangonui is the starting-point and centre from which to visit, by carriage or horse, all the Crown lands in the Mangonui County.

South of Auckland, along the Waikato Railway, there are numerous townships of more or less importance, but no starting-point for Crown lands until Mercer is reached at a distance of forty-three miles. It is situated at the borders of what is known as the Waikato Country, upon the Waikato River, which is tidal up to this point, and the township has a post and telegraph office and other conveniences. At sixty-five miles from Auckland by rail is Huntly, also on the Waikato River, a flourishing township, with a large output of valuable coal. It has also pottery, brick, and tile works. On the opposite side of the Waikato River large areas of Crown lands are being brought into use, and are carrying numbers of sheep and cattle. The next town is Ngaruawahia, or Newcastle, seventy-four miles from Auckland, situated at the junction of the Waikato and Waipa Rivers, with hotels, bank, post and telegraph office. It is a centre from which portions of Crown lands in Raglan County are reached, and also from it river-steamers run north and south to the various settlements. Ngaruawahia has a flourishing creamery, a brewery, and a cooperage. At eighty-five miles from Auckland the train reaches Frankton Junction, where a line branches off to Hamilton, Te Aroha, Paeroa, Thames, and Rotorua, the main line going through Te Awamutu, 100 miles from Auckland, to Poro-o-tarao, 146 miles. The line has been formed to Taumaranui, and may be open for traffic up to that point (174 miles from Auckland) about November, 1903, by which date the bridge over the Wanganui river will have been completed. This will enable platelaying and ballasting to be carried on over the Whakapapa and Owhango sections, which are now under formation for

a further distance of about 14½ miles. The summit of the line is reached at Waimarino (206 miles from Auckland). Te Awamutu is a thriving town; but to reach available lands for future settlement the traveller passes on by rail to Otorohanga (114 miles). Te Kuiti and Poro-o-tarao, twelve and thirty-two miles further on respectively, are both places at which there are accommodation-houses, forming convenient centres for visiting the fertile undulating limestone lands in the vicinity. Hamilton is a busy, flourishing town, situated on both sides of the Waikato River, with a population of about 1,300 persons, and is the centre of an agricultural and pastoral district. It possesses a creamery, flax-mill, brewery, and two soap-factories, besides other local industries. Cambridge, about thirteen miles by road and fifteen miles by rail from Hamilton, has a population of about 1,000, and is the headquarters of the Farmers' Club. It is a busy, thriving township, surrounded by good farming country. Between Hamilton and Cambridge, and in the country round, there are numerous creameries, cheese and butter factories. Wine and cider making is also successfully pursued, and there are several apiaries, from which large quantities of honey are produced. There are three flour-mills in the district, one at Cambridge, one at Hamilton, and the third at the terminus of one of the before-mentioned branch lines. One hundred and fifteen miles from Auckland by rail is Te Aroha, a quiet township, celebrated for its thermal springs, with good hotels. Another thirteen miles brings the traveller to Paeroa, a centre of mining industry, whence a branch line 12½ miles long is under construction to Waihi, a gold-mining town, and in another twenty miles the Thames Borough is reached.

The settlements at the Thames and Coromandel are essentially mining townships. The first is situated thirty-eight miles by steamer from Auckland, on the Firth of Thames, and at the mouth of the Waihou River. It has a population of about 4,000 persons. There is daily rail and steam communication with Auckland, and a railway connecting it with Paeroa and Te Aroha. Coromandel is about thirty-five miles from Auckland, with which it has constant communication by steamer; it is another mining centre, situated at the head of a picturesque harbour. Tauranga, with a population of about 1,000, is situated on the harbour of that name in the Bay of Plenty. Coaches run thither from the Thames, and from Rotorua; it has also constant communication by steamer with Auckland, and with Matata, Whakatane, and Opotiki. From the fact of the harbour being the only one on the East Coast between Coromandel Peninsula and Gisborne capable of receiving large vessels, the town is bound to be of importance in the future.

Opotiki, the second town of importance in the Bay of Plenty, is situated about sixty-five miles by steamer or road from Tauranga. It has weekly steam communication with Auckland, and is connected with Gisborne by a bridle-track. It is the headquarters of the maize-producing district, and has rich alluvial lands, from which good returns are obtained. It is a starting-point from which large blocks of Crown lands suitable for pastoral purposes may be reached.

The Township of Rotorua is situated on the shores of Rotorua Lake, at a distance of 171 miles by rail from Auckland. Travellers can reach Rotorua in one day from Auckland. It is the chief township in the hot-lakes district, and has also a large area of fairly good Crown land near, adapted for pastoral purposes. Considerable quantities of sulphur are obtained from the neighbourhood.

Crown Lands open for Settlement.

In the Mangonui County there are open about 15,662 acres, surveyed into sections of fairly good forest land, tolerably easy of access.

In the Bay of Islands County there are about 9,074 acres of Crown land surveyed, both forest and open, but the Natives still own some 152,000 acres, chiefly forest land, except about Kaikohe, where it is open and rich volcanic land, most of it broken, but fit for settlement.

In Hokianga County there are 23,752 acres of available Crown land, surveyed into sections, of good quality, nearly all covered with forest, and fit for immediate settlement. The Natives still own some 104,650 acres, almost all good land, and fit for settlement.

In Whangarei County there are about 6,443 acres of available surveyed land, mostly broken and forest-clad. The Natives still retain some 28,850 acres of land, part of it very rich.

In the Otamatea County about 408 acres surveyed, a good deal of this being alluvial swamp, and now well drained. The Natives still own about 20,000 acres, but not much of it is fit for settlement.

In the Rodney and Waitemata Counties about 6,832 acres of Crown lands are surveyed, most of it fit only for pastoral or fruit-growing purposes. The Natives still own about 14,000 acres in these two counties, some of it very good land.

In the Manukau County the Crown has some 1,703 acres surveyed of broken forest land, fit for pastoral purposes. The Natives still own about 15,000 acres, a portion of which is fairly good.

In the Waikato and Raglan Counties the Crown lands open and surveyed are about 9,573 acres, all fairly good land, mostly forest, and easy of access. In Raglan County the Natives still own the freehold of 150,000 acres, all good land.

In the Coromandel, Thames, and Ohinemuri Counties there are about 6,525 acres of Crown lands surveyed, a great deal of it too broken for settlement. In the last two counties a good deal of the land is swampy, and requires draining. The Natives still own 97,200 acres, much of which is very good.

In Tauranga, Whakatane, Opotiki, and Rotorua Counties the Crown has 12,671 acres open and surveyed, nearly all forest-clad, and generally broken; but in the last-named county the Natives retain a very large area, the greater part too broken or too much covered with pumice or volcanic ash to be fit for settlement.

In the Kawhia and West Taupo Counties about 32,938 acres surveyed and open, really first-class land, all suitable for pastoral purposes, and accessible from the Main Trunk Railway-line.

In addition to the above lands open and surveyed there are about 419,381 acres open of unsurveyed land. Month by month additional land is surveyed and placed on the market so that the demand can be satisfied.

Dairy Industry.

The progress made by the dairy industry in Auckland during the last few years is remarkable. The numbers of factories and skimming-stations for 1902 in the provincial district are 52 and 69 respectively, against 33 and 59 in 1901. The North Island shows an increase of 27 factories and 37 skimming-stations, the increase being by far the largest in Auckland—19 and 10. There is also a "tinning-house" in the district. Of the 52 factories in operation, 44 are butter and the remainder cheese factories. The larger companies own between them over 50 separate creameries, where milk is collected to supply the factories. The butter exported since the beginning of the 1902 season up to January, 1903, was 40,459 boxes of 56 lb. each and 3,638 kegs of 112 lb. each, totalling 23,867½ cwt., this season's output being 3,647½ cwt. more than that of last season at the same date.

Several creameries, &c., are now being erected, and are in their initiatory stages. When in full working-order they will greatly add to the returns.

The increase in the export of factory butter from Auckland to London for 1903 season is 1,356 packages, valued at £3,000. To this must be added Australian shipments, South African, and local requirements. New factories have been opened at Te Rau-a-Moa, Waihou, Hunua, Tauranga, Matakohe, and Matakana. The New Zealand Dairy Association have also largely extended their operations.

The industry increases in a satisfactory ratio as new land is opened for settlement and laid down in grass.

The recent drought has been the means of compelling the Australian States to look to this colony for a considerable portion of their butter supply. Regular shipments also have been made to South Africa, so it may be supposed that a market has been established there.

The output for next season will be largely increased, as during the last few years a great number of settlers have been placed on lands in the King Country, where they have cleared and grassed their holdings.

THE TARANAKI LAND DISTRICT.

J. MACKENZIE, Chief Surveyor.

The Taranaki Land District is situated on the western side of the North Island of New Zealand, at about its widest part, and may be said to be the most compact and fertile district of the colony, for, with the exception of the upper half of Mount Egmont, and of the ranges adjoining, which absorb about 36,000 acres, the whole of the area—minus what is taken up by the rivers, streams, and lakes—is suitable for settlement, and certainly two-thirds of the district is good land. The gross area of the district is 2,430,000 acres.

Physical Features.

Of mountains, the principal one is the beautiful volcanic cone from which the district takes its name, Taranaki, otherwise called Mount Egmont, which has an altitude of 8,260 ft. This mountain is the centre of distribution for a radius of twenty miles of the volcanic formation known as the "drift," which covers the volcanic rocks below an altitude of 3,000 ft. Hummocks composed of trachyte boulders and cement crop up here and there and make excellent metal-quarries.

Beyond the volcanic formation—that is, from about Urenui on the north and Hawera on the south—the country is generally broken, and the formation is known as papa, a calcareous blue clay, capped in many places by shelly limestone.

The northern portion, between the Tongaporutu and the Mokau Rivers, contains also limestone, greensands, and coal outcrops. At Panirau, a small tributary of the Mokau, about thirty miles from the sea, there is an isolated patch of volcanic agglomerate and tufas, and a similar formation is found at the north-eastern corner of the district.

Eastward of the base of Mount Egmont there are few, if any, mountains worthy of the name, although there are many ranges varying in height from 1,000 ft. to 1,500 ft. above sea-level, and, in a few instances—such as the Matemateonga and Waiaria Ranges—they run up to 2,500 ft.

The principal river is the Wanganui, which bounds the district on the east between Taumaranui and Pipiriki, a distance of about ninety miles. Its average width varies from 2 to 3 chains. For nearly the whole distance it is shut in by high precipitous hills, and in many places by perpendicular walls of rock. The scenery is very grand and beautiful. There are numerous rapids, but few of them are dangerous to skilful canoeists. Steamers run regularly from Wanganui to Pipiriki, a distance of fifty-five miles.

Messrs. Hatrick and Co. are running a steamer between Pipiriki and Putikituna, some twelve miles up the Tangarakau River. From this point a road (nine miles in length) has been constructed to join the Ohura (or East) Road at a point about forty-seven miles from Stratford, and in the middle of the Whangamomona Improved-farm Settlement, the settlers in which and surrounding blocks will thus have double communication, with Wanganui on the one hand and Stratford on the other. When the road is completed through to Auckland, tourists can enjoy a trip up the Wanganui River as far as Ohura, then back, and up Tangarakau River across to Ohura Road, then on to Auckland, or back to Stratford, as they desire. The dimensions of the steamer are 40 ft. long by 8 ft. beam, with a light draft of 9 in. and passenger capacity for forty, the amount of cargo depending on quantity of water in river from time to time. The time-table as at present arranged is: Leave Putikituna for Pipiriki and Wanganui every Tuesday morning at 10 o'clock, and every Sunday leave Pipiriki for Putikituna. The principal tributaries flowing into the Wanganui on the Taranaki side are the Whangamomona, at eighty-two miles; Tangarakau, at eighty-five miles; Ohura, at 114 miles; Ongaruhe, at 143 miles respectively from the Town of Wanganui.

The next river in size is the Mokau, bounding the district on the north. It is navigable for handy steamers drawing from 7 ft. to 8 ft. of water as far as the coal-mines, about twenty miles from its mouth, and for canoes as far as Totoro, twenty-six

miles further up. Several outcrops of coal are found on its banks, and, as limestone is also present, the river is likely to become an important waterway of the district. The scenery on either side, although not on quite so grand a scale as may be seen on the Wanganui, is very beautiful.

The other large rivers are the Waitara and Patea. The former has its source about midway between the coast and the Wanganui River, in an easterly direction from Pukearuhe, between New Plymouth and the Mokau. It is about a hundred miles in length, and runs out at the Town of Waitara, some ten miles north-east from New Plymouth. There is a bar at the mouth, but steamers of 300 tons can enter safely in calm weather, and, although there are numerous rapids on its course it is navigable for canoes for about ninety miles.

The Patea River rises in Mount Egmont, and, after traversing a tortuous course of about 110 miles, runs out at the extreme southern end of the provincial district. It has a bar-harbour, with a depth of 13 ft. to 14 ft. at spring-tides. Steamers of from 40 tons to 50 tons trade regularly to the town of Patea, which is situated a mile or so north of the mouth. The Patea is navigable for canoes for fifty miles.

Besides these rivers there are many smaller ones, and streams innumerable—in fact, no district in the world could be better watered and at the same time be so secure from disastrous floods. It is estimated that between the Mokau and the Patea there are no fewer than eighty-five named streams emptying themselves into the Tasman Sea, fully sixty of which flow from Mount Egmont.

Excepting the Ngaire Swamp, a block of open land near Eltham, 3,700 acres in extent, now partially drained and recently disposed of for settlement purposes, there are no plains, properly so called, in the district, although the stretch of very fertile country lying between the Waingongoro and Otakeho Rivers, comprising an area of about 25,000 acres, is known as the Waimate Plains. Of this area 13,500 acres have been disposed of, and the remainder, 11,500 acres, has been handed back to the Natives as a reserve.

There are no lakes worthy of the name. The largest sheet of water is Rotokare, situate about twelve miles from Eltham; it is about half a mile in length, with an average width of six chains. There are also a few small lakes inland from Waverley, at the southern end of the district.

The whole of the district, with the exception of a fringe of open country along the coast from Pukearuhe to Patea, averaging three miles in width, and containing about 250,000 acres, and some valleys at the north-eastern corner of the district, about 150,000 acres in extent, was originally covered with heavy forest, but this is rapidly disappearing under progress of settlement and erection of sawmills to deal with such timber.

The larger timber is chiefly rata, rimu, matai, tawa, kahikatea, kohekohe, pukatea, rewarewa, hinau, with a few totara scattered here and there. Among the smaller trees may be mentioned the kotukutuku or fuchsia, karaka, and mahoe.

As regards the timber industry, there are altogether thirty-nine sawmills, and the total quantity cut in 1902 was 22,187,995 ft., chiefly rimu, 15,530,000 ft.; kahikatea, 5,272,709 ft.; totara, 620,000 ft.; and matai, 765,286 ft. Most of these mills work together under Association rules and prices, their output for the year being 14,062,686 superficial feet. The others work independently, and their output amounted to 8,125,309 ft. for the same period.

An area of 72,565 acres, measuring six miles on every side from the summit of Mount Egmont, was originally set apart as a forest-reserve. To this has now been added 1,040 acres on the lower slopes of Pouakai Range, with an additional 5,500 acres on the Patua Range, making a total of about 79,000 acres, which has now by Act of Parliament been set apart as the "Egmont National Park," the internal affairs of which are administered by a partly elected and partly nominated Board of ten members. At about three miles within the reserve the forest begins to get stunted; and at four and a half miles it gives place to low wiry scrub, which ceases at five miles, or an elevation of about 4,000 ft. At 5,000 ft. the moss ends; beyond this point to the summit the mountain is composed of loose scoria and lava.

A comfortable house, known as the Egmont Mountain-house, has been built at an elevation of 3,200 ft. on the northern face of the mountain, at a distance of

twenty miles from New Plymouth by the Junction and Egmont Roads. Eighteen miles can be driven over, and the remaining two ridden. This house is maintained by the Egmont National Park Board, and is open for the accommodation of visitors from about the 20th of December to the middle or end of April in each year. The keeper acts as guide also. The time usually occupied in the ascent from the house is from three to four hours for men, and four to six hours for ladies. There are two women's rooms at one end of the house, and two men's at the other, with large common living- and dining-room in the centre. Visitors have now the option of being supplied with meals at a cost of 1s. 6d. each, or they may provide and cook their own food. Horse feeds, 1s. 6d. each; paddocking, 6d. daily, or 2s. 6d. a week. A small charge for use of house is made to visitors of 1s. per night or 5s. per week throughout the visit. In addition to the mountain-house, the Board has erected a cottage of three rooms, comprising two bedrooms (fitted with four bunks each), and one living room in between. This cottage is intended for renting by the week to family parties, only one such party occupying it at a time, the minimum charge per week being two pounds sterling for a party of four adults; over that number and up to eight (the limit allowed), 7s. 6d. each per week; children over five and under twelve years, half rates. The cottage is not let to any one party for a longer period than two weeks while there are other applicants. The Board provides cooking and other utensils, firewood, and water, also mattresses and pillows; but visitors must take their own blankets, and provide and cook their own food. The caretaker at the mountain-house keeps a small stock of the principal lines of food usually wanted for sale to visitors. The cottage is within 60 or 70 yards of the mountain-house, and in charge of the same caretaker, but parties desirous of renting it should communicate with the Honorary Secretary to Committee for Northern Division of Egmont National Park, New Plymouth, giving dates between which they require it. These applications are booked in order of priority of receipt (after notification that offers will be received, usually in the early part of December). The cottage is opened and closed on same dates as the mountain-house. Guide's fee for mountain, £1 per party. During the past season there were 1,022 visitors, remaining various periods of from one or two days to as many weeks. The view from the top is superb, including as it does, volcanic cones of Ruapehu, Ngauruhoe, and Tongariro, the whole of Taranaki, and a considerable portion of Auckland and Wellington Districts, also across Cook Strait to the mountains of Marlborough and Nelson Districts of the Middle Island. In fine weather, when the snow is off, the mountain can be ascended without risk. A considerable sum has been expended in improving the accommodation at the house.

The mountain can also easily be ascended from Stratford side, the return journey occupying about thirteen hours, including stoppages. Tourists can ride over the first eleven miles to the Pembroke Road Mountain-house (three rooms) above the bush-line, altitude 3,720 ft.: time occupied, about two and a half hours. A new two-roomed cottage has been erected, and is now in use. Here the horses are left, and the remaining climb has to be done on foot: time required for a fair walker, three hours, although, coming down, the distance can be done in two hours. Three hundred and fifty persons visited the mountain by this route during the season. Good hotel-accommodation, guide, and horses can be obtained in Stratford. Provisions are kept on reasonable terms by the caretaker at the house. The return trip can be varied by visiting Dawson's Falls and Kendle's Cascade, or by a run across to the Egmont Mountain-house. Those who do not care to attempt the summit will be amply repaid by the pleasure of the ride through the forest, and by the magnificent views to be obtained from the house. The houses have sleeping-accommodation for about thirty persons.

Another route now coming into favour is from Hawera or Eltham *vid* Manaia or Kaponga and Dawson's Falls. At the latter place a comfortable shelter-house, capable of accommodating over forty people, has been erected, and is known as the Falls Mountain-house (altitude, 2,990 ft.). This house, which is close to the Falls (65 ft.), is within an easy two hours' ride of Kaponga. During the season the house is in charge of a caretaker, and food, horse-feed, and paddocking can be

Y.B. Waterfall, Waikaremoana.

obtained. There were 1,084 visitors to Falls and mountain by this route during last season. A comfortable three-roomed cottage has been erected in connection with this house. Water is obtained from the adjoining creek by means of a ram. From the house to summit of Mount Egmont occupies from four to six hours' climbing at a moderate pace, the time being in accordance with strength and composition of party. From the top the tourist can, instead of returning by the same route, drop down to the mountain-house on the north or New Plymouth side of the mountain. The walk would not occupy over two hours, easy walking, or he could go out *viâ* Stratford.

Recently a track has been partly made from the western side of the mountain, enabling 200 tourists to ascend *via* Rahotu. A small accommodation-house has been erected, 32 ft. by 14 ft., consisting of a general room and two sleeping rooms, each containing twelve bunks. Tables, forms, and utensils have also been provided.

Soils.

The volcanic soil, the boundaries of which have been already described, varies a good deal in quality. The best is believed to be on the south side of the mountain, between Stratford, Hawera, and Opunake, but not less than two or three miles from the forest-reserve boundary. It is thought that the country now being opened to the north and east of the volcanic deposit—that is, the papa and limestone formation—will, from the presence of lime, be much richer and more lasting as pasture-land than that around the mountain. The carrying-capacity of the land is, on an average, two and a half to three sheep to the acre.

Dairying, Grazing, and Agriculture.

Taranaki is essentially a grazing and dairying district, its chief products being butter and cheese.

There are 97 dairy factories and 78 skimming stations scattered over the district. Of these factories, 83 produce butter only, 9 butter and cheese combined, while 5 produce cheese only. Sixty-nine factories and creameries are owned by proprietory companies, while 106 are run on co-operative principles. There are also in this district 14 registered packing-houses for milled butter, 251 registered private dairies for butter-making, and 2 for cheese only, besides many small plants run on individual farms of which no record is obtainable.

In September, 1896, a new work in connection with the dairying and meat industries was started in the shape of the Taranaki Freezing Works. They are situated at Moturoa, near the breakwater, and close alongside the railway-line. Substantial buildings have been erected, and a railway siding laid down. The machinery consists of a "Paxman" compound surface-condensing engine of forty indicated horse-power, driving a "Livide" compressor, capable of freezing 400 sheep per diem: although up to the present time the company has confined its attention wholly to the freezing of dairy produce. During the year 1902 the output from the works has been—Butter, 154,567 packages, weighing 3,864 tons net; cheese, 8,741 packages, net weight 586 tons. During the hot season the factories and railway-vans carrying butter have been supplied with ice from the works at a nominal cost. Most of the butter from the southern end of the district now goes to Patea.

At the Taranaki Bacon Factory, Fitzroy, substantial buildings have been erected, and a 6-horse-power "Livide" machine fitted up, and the owner has the works in full swing. The pigs are purchased from the farmers in the district and delivered at the styes in connection with the factory, where they are topped off with corn-feeding for fourteen days before being slaughtered. The number of pigs put through during past season—a slack one—was 2,025; price paid, £2,050. The hams and bacon exhibited by this factory have always taken first-class honours in the various agricultural shows. An industry like this cannot but prove of great assistance to settlers in the district, and should receive their most cordial support.

There are in the Taranaki District 18,903 horses, 239,910 cattle, 552,833 sheep, and 19,615 swine. These figures include all kinds and ages.

Agriculture has not hitherto been carried on to any great extent in this district. The total area under corn-crops and cut for threshing during season 1902–1903 was 7,363 acres; corn- and grass-crops cut for hay, chaff, or ensilage, 12,142 acres; corn- and green-crops for feeding to, or down with, stock, 1,043 acres; sown grasses and clovers for feeding down, 782,102 acres; sown grasses for seed, 766 acres; potatoes, 1,440 acres; beet, 10 acres: turnips, 7,617 acres; mangolds, 753 acres; rape, 2,136 acres; carrots, 501 acres; other crops, 82 acres; total area under crops of all kinds, including gardens, orchards, vineyards, 820,831 acres. Plantations, 1,186 acres; fallow, 106 acres.

The average yield of different grain-crops in bushels per acre for season of 1902–1903 was: Wheat, 40·0; oats, 42·0; barley, 41·0.

Mining.

The only mining going on at present is at the Mokau Coal-mines, which are situated on the Mokau River, about twenty-three miles from the sea, the river being navigable right up to the mines for vessels of 7 ft. 6 in. draught. The coal is the best class of pitch-brown, and is excellent for household and steam purposes.

Ironsand is found in great abundance on the seashore from Mokau to Patea, a distance of 130 miles. It produces, when smelted, from 50 to 60 per cent. of iron of the finest quality. The first attempt to smelt this sand was made in 1848, and several trials have been made since, but the heavy cost of production and the absence of capital and modern appliances have, so far, retarded the industry. Strong efforts are now being made to remedy this by the introduction of outside capital, and it is hoped these will shortly be successful.

Climate.

The climate of Taranaki is remarkably healthy, without any extremes of temperature. Below is given a table of mean, maximum, and minimum temperatures in shade for each month of the year ending December, 1902:—

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mean temperature	66	66	65	63	61	55·6	56	55·6	58	58·7	61·5	64·6
Extreme maximum temperature ...	83	84	80	83	84	83	84	82	86	84	85	90
Extreme minimum temperature ...	46	46	41	34	36	32	29	30	31	30	36	40
Number of days on which rain fell ...	19	13	14	24	25	18	21	16	26	22	22	23
Total rainfall per month in inches and decimals ...	3·600	2·590	2·630	6·340	5·690	5·030	1·490	3·800	5·830	5·580	3·540	5·650
Mean barometric reading for the month	29·99	30·11	30·19	30·21	29·88	30·152	30·18	30·157	29·904	30·078	30·10	30·017

The mean barometric reading was 30·080 in. for the year. Total rainfall, 51·770 in. on 243 days. The rainfall varies considerably, as, for instance, at Norfolk Road, three miles south of Inglewood, the rainfall for the year 1902 was 78·33 in. on 198 days; the maximum fall was 2·85 in. on 21st June. The average rainfall at New Plymouth during the past eight years was 61·712 in., and at Norfolk Road for same period 98·485 in.

Chief Towns.

The principal town of the district is New Plymouth (population about 4,885), situate on the seashore, about two miles from and to the north-east of the picturesque rocky islets known as the Sugar Loaves. The general appearance of the town is very attractive, and it abounds in neatly-kept gardens. The Recreation Grounds, from which a good view of Mount Egmont is obtained, form a favourite resort.

New Plymouth is 251 miles by rail from Wellington, the railway running in a northerly direction through the district from Patea to Sentry Hill, where it turns at right-angles westward for eight miles to New Plymouth. From Sentry Hill there is a branch line to Waitara, four miles distant.

The Port of New Plymouth is situated at the Sugar Loaves, two miles from the town. Protection for shipping is afforded by a concrete mole or breakwater running in a north-east direction for a distance of 1,900 ft. Under the lee of this there is wharf-accommodation provided for the coastal trade. Steamers of 1,000 tons can be berthed here in almost all weathers. The wharf is connected with New Plymouth by both rail and road. The breakwater was built at a cost of £200,000, borrowed under security of one-fourth of the land revenue of the Provincial District of Taranaki, and the right to levy a rate over certain lands. The present rate levied is ¼d. in the pound on the capital value. The principal over-sea exports from breakwater for the year (exclusive of all coastal trade) were: Bacon and hams, 1,007 cwt., value £3,491; butter, 81,009 cwt., value £374,089; cheese, 9,547 cwt., value £20,998; fungus, 1,064 cwt., value £2,106; leather, 262 cwt., value £1,201; tallow, 335 tons, value, £7,184; total value, £495,658. Imports (oversea): value, £81,488. Customs duties for the year, £24,894. During the year 629 steamers entered and left the port: tonnage, 233,482, with crews numbering 12,393. The number of passengers to and from the breakwater by sea, 27,747, being 4,800 more than the preceding year.

Manufactures in New Plymouth are represented by a sash-and-door, a boot, butter-keg, and three coach factories, a brewery, a cordial factory, a flour-mill, tannery, fellmongery, bone-mill, and iron-foundry, with freezing-works and bacon-factory in the suburbs. The town has both water and gas laid on.

Hawera, the next largest town, is situate on the eastern edge of the Waimate Plains. The population is 2,131, and the town is lit with gas. The Wellington–New Plymouth Railway runs close to it, the distance by rail from New Plymouth being about forty-eight miles. Hawera is surrounded by a first-class dairying and grazing country, capable of carrying a very large population. On 1st December, 1898, an up-to-date bacon-factory, costing some £1,200, commenced the work of killing and curing in Hawera, and this industry is now well supported.

The Town of Patea is situated on the coast, at the extreme southern end of the district, and has a population of 691. There is a splendid grazing district inland, with a large area of land yet to be opened up. There is a dairy factory, which has two branch creameries in the country. A bacon-factory has also been established. Exports for 1902 were: Wool, 5,716 bales; fungus, 1,178 bags; tallow, 425 casks; pelts, 182 casks; loose hides, 3,720; grass-seed, 70 sacks; butter, 79,800 cases; flax, 81 bales; meat, 155 cases; sheep, 200; sundries, 500 packages; bacon, 85 cases; empties, 936; transhipment, 525 tons. Imports: Ordinary, 7,702 tons; coals, 2,016 tons. Wharfages amounted to £1,293, dumping dues £412, tonnage dues £349. The number of steamers in and out were 174. The Harbour Board has an up-to-date wool-dumping press and hydraulic pumps. The width between the east and west pier-heads is 260 ft.; width of channel about 180 ft., gradually narrowing to 100 ft. as the beacons are approached. The pilot reports the depth of water at not less than 12 ft. at high-water springs, and 9 ft. at high-water neaps, with a straight channel.

Stratford, a comparatively young town, lies about midway between Patea and New Plymouth. It has already a population of over 2,000, and is growing fast. The height above sea-level is 1,000 ft., and the climate is bracing though somewhat moist. The main road to Auckland—known as the Stratford–Ongarue (now Ohura Road)—starts here. It has been formed as a cart-road for fifty-six miles, and as a bridle-road to sixty-one miles. If the work is continued energetically, communication with Auckland should be opened up in about three years' time. A commencement has been made with the construction of the railway line between Stratford and Auckland *vid* Ongarue, the line being completed as far as Toko. A bacon-factory has been started at Stratford under very favourable circumstances, and is likely to prove a public benefit, and also a financial success to the proprietary company. The works are on a fair scale and up to date. The machinery is driven by a 30-horse-power Victor turbine, the power being obtained from the Patea River through a tunnel 865 ft. long, cut across a bend in the river. The refrigerating engine is a 6-ton British Linde, while hot water is supplied from a high-pressure boiler in an adjoining building. The chilling-chamber holds about 120 carcases (or one day's

killing); here they remain overnight, and are then passed on to the curing-room, a spacious compartment of 80 ft. by 26 ft., capable of holding 1,000 carcases; from here they pass to the drying-room, of same size and capacity, on the upper story. A brick smoke-house, capable of dealing with 600 pieces at a time, has also been erected. The piggeries and slaughter-house are about a mile from the works, and are connected by tramway. The former consist of twenty compartments holding ten pigs each, and are conveniently arranged for feeding, &c. The output during the past season was 3,109 pigs, costing £5,886. On the Eltham–Opunake Road another factory, called the "Pioneer Bacon Factory," was started in 1897, and put through during part of last year 1,866 pigs—costing £3,662.

Waitara, a seaport town of 765 inhabitants, is situated on the river of the same name, a mile up from the sea, and about ten miles north-east from New Plymouth. The Mount Egmont Freezing-works have passed into the hands of a company styled the "Waitara Freezing and Cool Storage Company, Limited," who have rebuilt and greatly enlarged the works, the storage capacity now being for 25,000 carcases of mutton, together with five freezing rooms, capable of hanging 1,200 carcases, also a beef-chilling room and a mutton-chilling room. Provision is made at the slaughterhouse for accommodation of fourteen mutton and three beef butchers. The freezing-plant is a 60-ton Hercules, and is guaranteed to freeze 1,500 sheep per day. The boiling-down and tallow department is most complete and up-to-date, and a large manure plant is now in course of erection. The works are fitted throughout with electric light. The following produce was dealt with during the year: 18,443 quarters of beef, 19,865 carcases of mutton, 19,686 carcases of lamb, 175 carcases 271 sides and 280 quarters of veal: total weight, 2,309 tons. All produce is conveyed on board the New Zealand Shipping Company's ocean-going steamers (which anchor in Waitara roadstead) in specially constructed and insulated bags. These works are gazetted as Government grading and cool stores, which is a great convenience for outside dairy factories, as it avoids risk of injury to their produce after it has been graded. The exports from the port for the year 1902 were: Wool, 1,437,524 lb.; grain, 162 tons; grass-seed, 1,220 sacks; hides, 1,698; skins, 55 bundles; timber, 22,051 super. feet; flour, 38 tons; potatoes, 487 sacks; tallow, 751 casks; pelts, 58 casks; cattle, 282 head; horses, 12; sheep, 155; frozen mutton and lambs, 709 tons; frozen meat, 1,340 tons; butter, 94 boxes; fungus, 5 bales; general cargo, 627¼ tons. Total tonnage of exports for year was 3,930 tons. Imports for same period were: Grain, 35 tons; manure, 1,504 tons; lime, 37 tons; timber, 297,108 super. feet; coal, 4,211¼ tons; wool, 264 bales; fungus, 9 bales; hides, 42; skins, 27 bundles; flour, 498 tons; horse, 1; sheep, 366; flax, 305 bales; butter, 629 boxes; general cargo, 3,934 tons. Total tonnage of imports, 9,628 tons; making in all a gross total of 13,558 tons of cargo handled at the port during the year.

Inglewood, situated on the railway-line, sixteen miles south-east of New Plymouth, is a flourishing little town of some 720 inhabitants, rapidly coming to the front. The bacon-factory during the year put through 1,915 pigs, costing £3,860. The factory is worked by a 24 in. turbine, the water being conveyed in a race 10 chains long. It is provided with a four-horse-power tubular boiler, a Lard jacket, and Californian pump. There is also a size "D" ammonia refrigerating machine.

Eltham, a rising borough of 800 inhabitants, is making very rapid progress. The bacon-factory during the year put through 1,866 pigs, costing £3,662, exactly the same as Stratford.

Opunake, a seaport town of 466 inhabitants, was visited during the year by 35 steamers. Imports, 708 tons; exports, 108 tons; but more than half the trade of the district does not come or go through the port; in fact, the goods carried by road are on the increase. If the railway from Eltham is made this town should make rapid strides, as it is intended to improve the harbour.

The only other towns of importance are Manaia, population, 447; and Normanby, population, 370.

Roads and Railways.

The chief means of communication is the railway from Wellington, which traverses the district between Patea and New Plymouth—a distance of sixty-six miles. Through trains run every day, except Sunday, between New Plymouth and Wellington, and *vice versa*, a distance of 251 miles. As already stated, a railway from Stratford to Whangamomona has been commenced, and is already open so far as the village of Toko, six miles and a half from Stratford. This line will eventually be extended to connect with the North Island Main Trunk Railway at Ongarue Station.

The Main North Road runs from New Plymouth, passing through the Towns of Waitara and Urenui; and is formed as a cart-road to Mokau, the northern boundary of the district. All the streams are bridged with the exception of the Mokau River, on which is a good ferry. From Mokau there is a dray-road right through to Te Kuiti, on the Auckland railway system. About midway between New Plymouth and Waitara the Mountain Road diverges and runs almost due south, and, chiefly along the railway, for a distance of forty miles, connecting with the Main South Road at the Town of Hawera. This is at present the principal road in the district, tapping, as it does, large numbers of district roads, and passing through the Towns of Inglewood, Midhirst, Stratford, Eltham, Normanby, and Hawera.

The Ohura Road branches from the Mountain Road at Stratford. It is formed and open for traffic as a dray-road for fifty-six miles from Stratford and for horse-traffic to sixty-one miles. A coach runs in summer time every Monday and Thursday (returning on following days) between Stratford and Whangamomona Village, a distance of forty-one miles, and the road is now being extended into the interior so as eventually to connect with Auckland, and will open up a large area of fertile country.

The Main South Road from New Plymouth follows the trend of the coast to the south, and was at one time the coach-road to Wellington. It passes through the Villages of Omata, Oakura, Okato, Rahotu, Otakeho, Manutahi South, and Kakaramea, and the Towns of Opunake, Manaia, Hawera, and Patea.

The Junction Road runs south-east from New Plymouth, and crosses the Mountain Road and railway at Inglewood, thirteen miles out; it is metalled for thirty-six miles and a quarter, formed as a dray-road to forty-four miles and a half, thence as a bridle-road to forty-five miles and three-quarters, where it connects with the Ohura Road at a distance of thirty miles from Stratford. This road crosses a number of district roads; hence its name.

The Opunake Road runs from Stratford to Opunake, twenty-six miles, skirting the southern base of Mount Egmont. It is formed and metalled for twelve miles from Stratford; the remainder is open for horse-traffic only. Vehicular traffic turns down the Manaia Road to Kaponga, thence along the Eltham–Opunake Road to the latter place. This route is metalled throughout.

The Eltham Road runs from Eltham to Opunake, twenty-five miles, connecting with the Opunake Road at Punehu, seven miles from Opunake. This is formed and metalled throughout.

The other main roads in course of construction are the Rawhitiroa Road, leaving the Mountain Road near Eltham; the Otaraoa, Moki, and Okoke Roads.

Lands open and available for ordinary Selection.

In the Ohura and Aria Survey Districts, and lying near the Ohura Road, between Tuhara and Ongarue: Seven allotments, comprising 6,761 acres; generally slopes and spurs covered with mixed forest, good soil, on a papa formation, and well watered; elevation, 450 ft. to 1,800 ft. above sea-level. The land is suitable for cattle and sheep raising, while small portions will be found suitable for dairying.

Forty-five allotments, comprising 46,271 acres lying inland of Waverley, Patea, and Waitotara, also to the east of Eltham, and tapped by the Eltham–Waitotara Road and branch roads, also by the various roads leading from the towns mentioned. As a rule the land is rough, and in some places swampy, wholly covered with mixed forest; soil, varying from fair to good; well watered. When the best portions have been cleared they will be found suitable for cattle and sheep raising, and small portions on the river flats may be found suitable for dairying.

Forty-one allotments, comprising 40,879 acres, lying inland of the Mokau Road and Tongaporutu River, extending also along the Moki Road and its branches towards the Ohura Road, and embracing the land in the valleys of the upper waters of the Waitara River. Generally comprising rough pastoral country, suitable for cattle and sheep raising, with portions suitable for dairying; fair to good soil, wholly covered with mixed forest; papa formation, well watered.

Six allotments, comprising 5,737 acres, at the back of settled districts of Strathmore, Pohokura, and Whangamomona. Rough pastoral country, wholly covered with mixed forest; soil fair to good, on a papa formation, and well watered. The country is adapted for sheep and raising young cattle, while small portions may be found suitable for dairying operations.

Lands being prepared for Settlement.

In the Ohura and King Country: 110,000 acres, comprising mixed open and forest land of good quality, varying from undulating to hilly, and lying to the south of Mokau-iti, and between it and the Ohura River.

In Upper Tongaporutu District: 19,000 acres, comprising hilly country, covered with heavy forest, fair to good soil, on a papa formation.

Near Whangamomona, and lying to the north-west and south-east of the township, comprising hilly country covered with heavy forest; 36,800 acres.

In the Upper Whenuakura District, lying at the headwaters of the Whenuakura and Moeawatea Streams, and comprising rough and broken country, wholly covered with forest; soil fair to good, on a papa formation, and well watered; 12,604 acres.

Various forfeited sections in the Upper Waitara, Omona, Cape, Mimi, and Mahoe Survey Districts; 11,472 acres.

Total, 189,876 acres. All the lands will be found suitable for mixed occupation, such as raising young cattle and sheep, and in the more favoured localities for dairying.

In addition, 333,689 acres are in the hands of the Crown partially explored, a good deal of which will be suitable for settlement.

There are 239,600 acres of land in this district still in the hands of the Natives.

A guide, giving particulars of any Crown lands open for selection, will be supplied free to any one applying personally or by letter to the Lands and Survey Department, New Plymouth.

It may be said, in conclusion, that there is every sign of genuine prosperity throughout the district, which has advanced rapidly during the last few years, and will no doubt continue to do so.

THE HAWKE'S BAY LAND DISTRICT.

E. C. Gold Smith, Chief Surveyor.

The Land District of Hawke's Bay comprises that portion of the east coast of the North Island from Cape Turnagain, in latitude 40° 30′, northwards to Lottin Point, about thirty miles beyond the East Cape, and contains the Waiapu, Cook, Wairoa, Hawke's Bay, Waipawa, Patangata, Woodville, and Weber Counties.

It has a seaboard of 300 miles, with an average depth from the coast of forty-five miles, and embraces an area of 6,063,000 acres. Its western limit is defined by the Ruahine, Kaweka, Ahimanawa, Raukumara, and other high ranges that form the watershed between the rivers flowing through it to the sea, and those that run to the west coast and the Bay of Plenty.

Physical Features.

The Ruahine Range extends northwards for about sixty miles from the Manawatu Gorge as far as the valley of the Ngaruroro River. Its altitude varies from 3,000 ft. to 6,000 ft., and for a considerable distance its summit is snow-clad during the winter months.

The Kaweka, a shorter range, divided from the Ruahine by the Ngarururo River, attains an altitude of 5,650 ft., is very rugged and steep, and a prominent feature in the landscape in winter, covered as it then is with snow.

From these two ranges, which fall very abruptly on the Hawke's Bay side the land slopes gradually to the sea, forming in some parts fine rolling hills—the essence of a sheep-country—in others extensive plains, with comparatively little poor soil.

Northwards from the Kaweka there is a series of forest-clad ranges of varying height, stretching away in the direction of the East Cape. Hikurangi, the highest point, is a bold peak with an elevation of 5,606 ft., rising so abruptly on all sides that the ascent can be made only at one point, and that with difficulty.

The only lake in the district of any extent is Waikaremoana, so famous for its magnificent scenery. It lies about thirty-five miles inland of Wairoa (Clyde), and is eleven miles in length, with a breadth at the widest part of about eight miles. Nestled among precipitous mountain-ranges, wooded to the water's edge, with numerous bays and inlets, it has a natural beauty hardly to be surpassed.

From Wairoa there is a formed road to the lake, and twenty-five miles round it, as far as the Oporuahine River.

The principal plains are: (1.) The Ruataniwha, some fifty miles south of Napier. This is 120 square miles in extent, is for the most part occupied as sheep-runs, and carries a large quantity of stock. (2.) The Heretaunga Plain, with an area of ninety square miles, lying immediately to the south of Napier. This is rich alluvial land; a large portion is thickly settled, the remainder used for grazing and agriculture. The only other plain of any extent is at Poverty Bay. It has an area of sixty-five square miles, is very fertile, well cultivated, and has a large population.

The district is well watered throughout by numerous rivers and streams, but none are navigable except the Wairoa and Turanganui, and these only for vessels of light draught. They are both tidal, and serve as ports to the Towns of Wairoa (Clyde) and Gisborne.

Communication.

The chief outlets from Napier are three in number. First the Napier-Wellington Railway, which traverses the centre of the southern half of the district for its whole length of 100 miles, and may be called the main artery of communication. Parallel to it throughout runs an excellent gravelled road, which was made before the construction of the railway. On either side there are numerous branch roads, which act as feeders, making a very complete system of internal transit. Another main road runs in a westerly direction to Kuripapanga, distant forty-five miles, a favourite resort in the summer time, removed as it is from the heat of the country near the coast. A coach runs thither twice a week, and on thence to Inland Patea, where the Napier Road meets the roads to Hunterville, Tokaanu, and the Wanganui River.

The part of the district served by these two main lines—viz., that between Napier and Woodville—contains the greater portion of the population, and from the extent of arable land within it is likely in the future to be very thickly peopled. Notwithstanding that so much of the Native land in this part is unoccupied and in its natural state, there are nearly a million of acres of land in sown grasses.

The main road northwards from Napier is the coach route to Taupo, which, soon after leaving the fertile Petane Valley, begins to traverse poor country, and twenty-five miles out enters the light pumice soil.

The Napier-Wairoa Road has been completed, with the exception of bridges at Waikare and Matahouroa Streams, and there is a weekly mail-coach service between the two towns. The coach is stopped occasionally by floods at the streams mentioned, and until the bridges are completed the heavy traffic between the two places will be done by a small steamer.

From the Wairoa a main road runs northward, through the Village of Tiniroto and on to Gisborne, a distance of seventy-five miles. For a considerable distance it runs through hilly country, and, as it has not been gravelled, wheeled traffic is

suspended during the winter months; but a coach runs weekly for nine or ten months out of the year. The road from Wairoa to Gisborne *viâ* Nuhaka Hot Springs is completed and open for wheeled traffic.

Between Gisborne and Opotiki, in the Bay of Plenty, communication is not good. The road, which is 120 miles in length, has been formed to the Motu Township, a distance of sixty miles. In the neighbourhood of the forest a large area of Crown lands has been taken up and settled during the last few years. The rest of the journey must be done on horseback. A railway is being constructed from Gisborne in the direction of Motu. The portion from Gisborne to Ormond, a distance of ten miles, and for three miles beyond, is open for traffic. The continuation of this line is being pushed forward, and will greatly assist the progress of the district.

The country to the north of Gisborne is being rapidly opened up, the coastal road being open for traffic as far as Port Awanui, while several of the arterial roads are being extended.

Small steamers trade regularly along the coast, calling in at Tolago and Tokomaru Bays, Waipiro, Tuparoa, Awanui, Kawakawa, and other small bays.

Pastoral Industries.

The Hawke's Bay District is pre-eminently a sheep-grazing country, and the large area of 2,527,216 acres has been improved and sown in English grasses, clover, &c. In April, 1902, there were 4,606,322 sheep in the district, and the numbers of other stock were as follows: Horses, 30,761; cattle, 187,238; and swine, 14,911. The value of the wool exported from Hawke's Bay for the year ended 30th June, 1902, is £440,908, a considerable increase over last year.

Freezing works are established at Tomoana, Port Ahuriri, and Gisborne, and the export of frozen meat for the year ended 30th June, 1902, was as follows: Beef, 3,052 tons, valued at £76,300; 146,019 carcases of mutton, valued at £91,262; 102,141 carcases of lamb, valued at £56,178; preserved meats, 55 tons, valued at £2,750. Though the exports quoted show a decrease on the previous year's figures, a marked increase is recorded for the total exportations from the district, such increase for the year being no less than £95,969.

Timber Industry.

As showing the importance of this industry, there are numerous sawmills in the district, and, outside of wool, frozen meats, tallow, and pelts, sawn timber ranks first in the value of the exports. Timber to the value of £26,365 was exported for the year ended 30th June last, as against £15,850 for the previous twelve months. It is satisfactory to note that sawmills have been established at Pohui and Puketitiri, in which districts there are large areas of valuable forest. As the bulk of the sawn timber from these places must necessarily come through Napier, it follows that the port and trade of the town will reap immense benefits from the further development of the industry in its vicinity.

Trawling Industry.

Twenty-three tons of fish, representing a value of £230, were exported last year. It is a matter for regret that what at one time gave every promise of becoming a large and promising industry should be in the position these figures disclose. The trouble appears to be that fish are not now present in the same numbers as when the industry was first started.

Agricultural Pursuits.

Agriculture is not carried on to the extent it might be with so much land suitable for root- and grain-crops. No doubt this is due to the profits made in sheep-farming. It is chiefly confined to the Heretaunga Plains and the flat lands near Gisborne. The soil is favourable to root-crops; potatoes range from 12 to 15 tons to the acre, and in some instances exceed this amount. Only a moderate quantity of grain is grown; barley, for which the soil seems well adapted, returning from 20 to 60 bushels of good sample to the acre.

Dairying.

Settlers are now turning their attention to dairying, and factories have been established in the bush districts at Norsewood, Ormondville, Maharahara, Hastings, Gisborne, and Woodville, whilst several others are in contemplation. At the last-mentioned town a cheese-factory has been in existence for some years, and turns out an excellent article much sought after in other parts of the colony. There can be no doubt that the further development of the dairying industry must materially benefit the farming class—especially the small farmer, who may find it difficult to make a living out of sheep.

Other Industries.

Other industries, such as fellmongeries, soap-works, boot, coach, and sash-and-door factories, &c., are established in the principal towns. During the year 1901 the Hawke's Bay Woollen Manufacturing Company commenced operations in their factory at Napier, and now gives employment to a large number of hands.

Climate.

The climate is generally of a mild character, and, though hot along the coast-lands in the height of summer, it is, owing to the dryness of the atmosphere, not so relaxing as in parts of the island farther north. The rainfall is light, excepting in the bush districts and high inland country.

Napier itself is recommended by many medical men as a resort for invalids suffering from pulmonary complaints, chiefly on account of the mildness of its winter season. The average rainfall for thirty-four years is 37·070 in.

Towns.

Napier is pleasantly situated on the peninsula known as Scinde Island, which is joined to the mainland by a narrow shingle-bank several miles in length. It is a busy town, with a population of about 9,500. The business part is on the flat land at the foot of the group of hills that take up the greater part of the peninsula. These hills, formerly barren and waste, are now occupied by numerous private residences, and the very general tree-planting has given the upper town a distinctive and pleasing character. There is an excellent water-supply, derived wholly from artesian wells of large size, and pumped by machinery to reservoirs on the tops of the hills. The shipping trade, as the large exports show, is especially active during the wool and frozen-meat season. It is still carried on at Port Ahuriri, about a mile from the town; but has recently, in a large measure, been transferred to the fine breakwater which is now almost completed. During the year ending 30th June, 1903, the imports amounted in value to £214,886, and the exports to £971,599.

Gisborne, the trade-centre and port of what is known as the Poverty Bay District, is a prosperous town of about 2,700 inhabitants, exclusive of Maoris, rapidly increasing in size and importance, as the large quantity of unimproved land in the Cook County is fast becoming settled and made productive. There are 1,313,663 sheep in Cook and Waiapu Counties, and Gisborne's exports amounted to £533,166 in value for the year ended June, 1903.

Clyde, the county town and port of the Wairoa County, is picturesquely situated on the Wairoa River, about three miles from the mouth. The river is navigable for small craft as far as the village of Frasertown, twelve miles further up.

With a few exceptions, the towns and villages to the south of Napier are all situated on the line of railway running from that city to Wellington. The principal are: Hastings, a rising town of about 3,700 inhabitants, Waipawa, Waipukurau, Dannevirke, and finally Woodville, about three miles from the Manawatu Gorge, and distant ninety-eight miles from Napier. It is at this end of the district that the Crown has, in the last few years, successfully planted settlement, and, in place of the continuous forest known as the Seventy-mile Bush of earlier days, there are now prosperous townships, with various thriving industries established.

Crown Lands.

The land held by tenants of the Crown, of whom there are 972 in the district, under the various systems of tenure, amounts to 655,298 acres, and there remain about 194,080 acres not yet dealt with in any manner.

The latter is, for the most part, suitable for pastoral purposes only, any fit for agriculture lying in small, isolated spots, widely scattered, and such as could not be selected independently of the surrounding inferior land. Nearly the whole is broken forest country, fitted more for sheep than cattle, and having an average carrying-capacity, when cleared, of about one sheep to the acre, though the best of it might possibly graze from two to three. The land is chiefly in the Hangaroa, Koranga, Mangatoro, Norsewood, and Motu Districts, and the back-country of the Waiapu County.

About 67,228 acres are now open for selection. This area includes lands open under the small grazing-run system.

The following is a short description of some of the areas to be dealt with in the future :—

Waitahaia Block, Waiapu County.—16,350 acres. Nearly all forest country, with soil varying from light to good.

Mata Survey District.—1,756 acres, being the Aorangiwai No. 1 Block ; broken forest country ; soil fair.

Tutamoe Survey District.—7,750 acres, being the Huiarua No. 1 and Tutamoe Blocks ; all bush, broken, soil medium. Situated about thirty miles from Tokomaru.

Urutawa Survey District.—9,140 acres, being the Whitikau No. 1 and Whakapaupakihi Blocks. Broken forest country, soil fair.

Koranga and Ngatapa Survey Districts.—About 42,684 acres, being part of the Tahora No. 2 Block, situated north of Waipaoa and Ruakituri Rivers, and between them and the Koranga River. It comprises some very hilly country, but, though nearly all the land is covered with bush or scrub, there is some fair soil, and would make fair pastoral country. All well watered. North of this portion the Crown has some 70,000 acres in the Auckland Land District, west of the Waioeka River.

Hangaroa Survey District.—25,004 acres cut up into five small grazing-runs, comprising undulating and broken country with light soil on papa formation. Forty-two miles from Gisborne.

Motu Survey District.—23,900 acres, being the Motu Block. Part undulating country, rest broken. One-third open fern and scrub, remainder forest clad. Soil light. About sixty miles from Gisborne, along the Opotiki Road.

Patoka Survey District.—4,028 acres, chiefly forest country, with light soil. Part river-bed.

Puketapu Survey District.—320 acres, in Block I. Waste land, north of the Pokopoko Stream, and west of Sections 16 to 20. Chiefly gullies.

Tahoraite and Norsewood Districts.—About 7,366 acres, being the Tamaki No. 1 Block. Bush country, all covered with heavy forest. A good proportion undulating land. All well watered. It will probably be some time before this block is opened for selection.

Norsewood Survey District.—Piripiri Block, 17,056 acres. Part of this block is in the Wellington Land District. It will probably be some time before this land is in the market.

In addition to the foregoing, there is an area of 17,345 acres, principally small blocks scattered over various districts, as follows : Mata, 1,074 acres ; Hikurangi, 1,931 acres ; Tokomaru, 216 acres ; Waingaromia, 4,522 acres ; Uawa, 372 acres ; Hangaroa, 1,218 acres ; Waiapu, 798 acres ; Matakaoa, 145 acres ; Opoiti, 3,676 acres ; and Nuhaka North, 575 acres agricultural and 3,025 acres pastoral.

Native Lands.

Of the Native lands in this district, a very considerable portion has been leased to Europeans, but there still remains in the hands of the Maoris a valuable estate, comprising both agricultural and pastoral country, and including some 800,000 acres of excellent land. This land lies for the most part in the Waiapu County, towards the East Cape.

Thermal Springs.

At Waipiro Bay and Nuhaka thermal baths have been constructed and their medicinal properties are highly spoken of. Both places are now accessible by coach, and the number of visitors, especially in the summer-time, is considerable.

THE WELLINGTON LAND DISTRICT.

JOHN STRAUCHON, Chief Surveyor.

The Wellington District is bounded towards the north by the Auckland District; towards the east by the Hawke's Bay District, to the sea; thence by the sea to the Patea River on the West Coast; and thence bounded towards the west by the Taranaki District. The area contained within these limits is about 6,810,958 acres. It lies between the parallels of 39° and 41° 30′ south latitude; its greatest length north and south is about 180 miles, and its mean width east and west about sixty miles.

General Physical Features.

The district is divided into two well-defined parts by a mountain range, which forms part of the backbone of the North Island. At its northern end this range—there known by the name of Ruahine, and averaging a height of about 4,000 ft.—divides Wellington from Hawke's Bay; but after passing the point where it is intersected by the Manawatu River, the range takes the name of Tararua for many miles, until, at about forty miles from the termination on the shores of Cook Strait, it divides into two main ranges, known respectively under the general names of Rimutaka and Tararua, both ranges averaging from 2,500 ft. to 3,500 ft. in height, the highest point being 5,154 ft. Parallel to the main range, and divided from it by the Wairarapa Plain and the undulating country to the north, is a series of ranges at a few miles inland from the East Coast, known as the Puketoi, Taipo, Maungaraki, and Haurangi Ranges. Lying on the northern border of the district are the Kaimanawa Ranges, for the most part open and grass-covered, rising to a mean height of about 4,500 ft. Westward from the latter mountains, and divided from them by a deep, broad valley, in which flow the Waikato and Wangaehu Rivers, is the volcanic chain of mountains containing Ruapehu, 9,008 ft., and Ngauruhoe, an active volcano, 7,515 ft. high. The long sweeping curve of Cook Strait, forming the south-western limit of the district, is bordered, from the Patea River to within thirty miles of Wellington, by a comparatively level and undulating country, now nearly all under cultivation, having an average width of about fifteen miles. This is one of the finest parts of the colony, and is celebrated for its stock-raising capabilities. It was originally in a great measure open, though the southern part, where the plain is narrowed in between the sea and the Tararua Range, has a good deal of forest on it, now fast disappearing under the axe of the settler.

Inland of this coastal plain, at varying distances from the sea, the country gradually rises to a mean height of about 1,500 ft. to 1,800 ft., and becomes a good deal broken in character. It was originally forest-clad almost throughout. It is much cut up by rivers and streams flowing from the interior to the sea, of which the principal, commencing from the north, are these: The Waitotara, the Wanganui, the Wangaehu, the Rangitikei, the Oroua, the Pohangina, and the Manawatu, which last, after leaving the gorge in the Ruahine Ranges, runs through level land to its mouth in Cook Strait. This broken country, being everywhere composed of papa, or marly formation, which takes grass excellently, promises in the near future to be a large sheep-carrying district.

At about fifteen miles south of the volcanic peaks of Ruapehu Mountain the papa country terminates in a fairly well-marked escarpment, giving place to a more level and undulating country formed of volcanic matter, the greater portion of which is forest-clad, though on the south-east, east, and west sides of that mountain there are open grassy plains, of no great fertility, but yet suited to pastoral pursuits.

To the eastward of the main range formed by the Rimutaka and Tararua Ranges is the great depression known at its southern end as the Wairarapa Plain, which

gradually rises northwards from the lake of that name into wooded, somewhat broken country, of no great height, at a distance of some forty-five miles from the sea. From here the country falls again slightly to the Upper Manawatu River, the depression in this part being marked by the extensive flats in the neighbourhood of Pahiatua, and by the shallow valleys of the Mangahao, Mangatainoko, and Tiraumea Rivers and their branches. For thirty miles from the sea this great valley is mostly open, with patches of forest here and there, but becomes more plentifully wooded at the base of the Rimutaka and Tararua Ranges. The quality of the soil varies from light and stony, on the Wairarapa Plains proper, to rich papa country, as the northern end is approached. The southern end of this country is watered by the Ruamahanga River and its tributaries. Generally the district is a pastoral one, though agriculture is also pursued successfully. The neighbourhood of the Puketoi Ranges is in many places composed of limestone, and promises in the future to become a very rich pastoral district, such as will support a considerable population. In the forks formed by the Tararua and Rimutaka Ranges the Hutt River takes its rise, and runs in a southerly direction through an undulating or level country, finally falling into Port Nicholson. The valley contains some very fine land, generally held in small holdings.

Plains.

The two most important of these have already been mentioned. On the eastern side of the main range the Wairarapa extends northward from the lake of that name for about forty-seven miles, with an average width of about nine miles. In some parts, especially on the flats along the Ruamahanga River, the soil is alluvial and rich; in others, though stony and unfit for cultivation, it is nevertheless grassed, and carries stock well in the winter and rainy seasons. The plain is watered by the Waiohine, Waingawa, and Ruamahanga Rivers, and contains altogether about 200,000 acres, much of which is good agricultural land. On the other side of the district, west of the Tararua and Ruahine Ranges, there is a large block of land so nearly level that it may be called a plain, extending from Paikakariki (twenty-seven miles from Wellington) to Marton (a few miles north of the Rangitikei River), and contains about half a million acres. Starting as a narrow strip between the hills and the sea, the plain widens out by degrees until at Feilding it is at least twenty miles in breadth. Along the beach runs a fringe of sandhills, but behind this is to be found some of the best farming and grazing land in the colony. There are two plains inland—Murimotu and Waimarino—both lying some 2,200 ft. above sea-level, in the neighbourhood of Mount Ruapehu, the former to the south and the latter to the north-west of the mountain. The soil is covered with a coarse native tussock, and, though capable of carrying stock, is of a light porous nature, and cannot be classed as agricultural land.

Rivers.

First among these is the Wanganui—"the Rhine of New Zealand"—with a length of 136 miles from its source, near Mount Tongariro, to its outlet. The Manawatu is next in importance. Rising in the Ruahine Range, it flows through the picturesque Manawatu Gorge, joining the sea at the port of Foxton. The Rangitikei, the third in size, rises in the Ruahine Mountains, and flows through the Awarua country, where it is joined by the Hautapu and other large tributaries. After a course of over a hundred miles it reaches the sea some little distance below the Township of Bulls, on the West Coast. Lesser rivers on the West Coast are the Waitotara (north of Wanganui), the Wangaehu (which takes its rise in Mount Ruapehu, and from its source to its mouth is so strongly impregnated with sulphur that fish cannot live in it), the Turakina, and the Otaki. The only other rivers of any size are the Hutt (Heretaunga), emptying itself into the Wellington Harbour, the Ruamahanga, flowing through the Wairarapa Valley and lakes into Palliser Bay, and on the East Coast the Pahaoa, Aohanga, and Akitio.

Lakes.

The only lake of any size in the Wellington District is the Wairarapa, lying between the Rimutaka and Haurangi Ranges, towards the southern end of the

Wairarapa Valley. It is about twelve miles long and four broad, and is connected by the Ruamahanga River with Onoke, a small lake separated from Palliser Bay by a narrow shingle spit only. A passage through the spit is opened from time to time when the lake rises above its natural level and overflows the low-lying flats along its margin. Water-fowl of every kind—among them numbers of black swans—are to be found round about these lakes.

Scenery.

The views obtained from the railway-line in the ascent and descent of the Rimutaka Range are among the best in the neighbourhood of Wellington, and the road through the Forty-mile Bush was long considered one of the most beautiful drives in the North Island; but its beauty has been diminished by the felling of the bush consequent on the increase of settlement. The same may be said of the Manawatu Gorge, famed in the old coaching days for its lovely scenery, but now sadly marred by the construction of the railway-line. The most beautiful drive now left is through the Awarua Bush, from Ohingaiti to Moawhango. From this road, as it winds round the spurs, most charming glimpses are obtained of the Rangitikei River and the blue hills beyond, and at other points the traveller looks up deep ravines where the graceful fern-tree stands out in bright relief against the dark green of the native bush. Another road from Pipiriki, on the Wanganui River, to the Murimotu Plain, traverses one of the most magnificent forests in the North Island. Here the bushman's axe has felled only the timber standing on the road-line, and the track runs beneath the shade of the largest and stateliest maire and rimu known. Beautiful as these drives are, the scenery on the Wanganui River is still more lovely. A few miles below Taumaranui the river enters a series of gorges, shut in by high precipitous cliffs. Sometimes the canoe glides slowly through quiet reaches, sometimes shoots rapids which make the traveller hold his breath till they are passed, and then again traverses places where the water is ever in turmoil, boiling and eddying in whirlpools, taxing the energies of the most skilful Native steersman, and testing the nerve of the most courageous tourist. These experiences, with the views obtained of the banks, densely wooded even where the papa rock rises almost straight from the water's edge, make the eighty miles journey from Taumaranui to Pipiriki an event not easily effaced from the memory. Between Pipiriki and Wanganui excellent steamers are now running, so that the beauties of the lower part of the river may be seen by all without trouble or discomfort.

Forests.

The Wellington District is essentially a forest country, for out of the 6,810,958 acres contained within its borders about 3,000,000 are still under bush. By far the largest forest is the Waimarino, having an area of at least three-quarter million acres, a large portion of it being nearly level land, containing magnificent timber, principally totara, maire, matai, rimu, and other pines. This forest is as yet hardly touched, though timber is being cut at Raetihi for the settlers now making their homes in the neighbourhood. The distance from the settled districts or any port will render the timber in this part useless as a marketable commodity until the country is opened up by the Auckland Main Trunk Railway now in course of construction.

The next in size is the Rangitikei-Hautapu Forest, containing an area of about 350,000 acres, a considerable portion in the Awarua Block being first-class milling timber, which will be available as soon as the extension of the Hunterville Railway-line taps it. Between this and the Waimarino Forest there is a large extent of bush-land, drained by the Turakina, Mangamahu, and Wangaehu Rivers, extending up to the Wanganui River, and containing about 300,000 acres. Very little of this, from its inaccessibility, will be utilised for sawmilling purposes, but a great deal of it, together with a further block of 230,000 acres on the west side of the Wanganui River, will be cleared by the settlers and sown down with grass. A further block of about 100,000 acres of forest-land lies in the Pohangina Valley and on the slopes of the Ruahine Range. A large portion of this has been taken up and is now being settled.

The forest-land on the West Coast extends from Pukerua to the Manawatu Gorge, on the west side of the Tararua Range, and contains an area of about 300,000 acres, the bulk of it being fit only for turning into pasture. The most available part of it, alongside the Wellington–Manawatu Railway, is being extensively cut into by sawmillers at Levin and other places on the line.

After this in size is the forest on the eastern slopes of the Tararua Ranges, extending from Featherston to the Manawatu Gorge, which includes what remains, of the well-known Forty-mile Bush, containing probably about 175,000 acres. Portion of this area is being quickly denuded of timber by the sawmills established at Pahiatua, Newman, Hukanui, Eketahuna, and by settlers. A tract of about 50,000 acres lying to the east of the Puketoi Range cannot be utilised for milling purposes, as it is not tapped by any branch railway-line, and its distance from the main line would probably render the business unprofitable except for local purposes. Nor are there any suitable ports along the coast where timber could be shipped.

The other forests are, one near Lake Taupo, and the Haurangi Forest on the east side of the Wairarapa Lake. These consist for the most part of birch-covered hills, and cannot be considered as valuable for milling purposes.

Soil.

It may be said that the Wellington Land District contains within its borders a greater quantity of good land than any other in the North Island, very little, except the mountain-tops, being unfitted for use, while some of it is of very superior quality, suited for the growth of the productions of every temperate climate. As much of it is still forest-clad, settlers must look forward to having to make their farms by felling and burning the bush before grass can be sown, and, as it takes from ten to fifteen years before the plough can be used in bush-land, grazing, for which the climate and soil is admirably adapted, will be the principal industry for some time to come. It is generally calculated that the cost of felling and burning ordinary bush varies from 25s. to 35s. an acre. To this must be added about 20s. for seed and fencing. It is no uncommon thing for a return to be received at from twelve to eighteen months after felling. The usual practice is to put sheep on to the new lands soon after the grass has obtained a good hold. The process of improving the lands by the gradual "logging up" and burning of the fallen tree-trunks is a long one, but it pays in the end, for in this way fine pasture-lands are obtained on the hills, and agricultural lands on the flats.

Climate.

The climate of Wellington District is healthy and mild, the mean annual temperature (in the city) being 55·4, whilst the mean rainfall is 48·49 in. per annum. The rainfall differs, however, according to locality. Inland and near the ranges it is much greater. The top of Ruapehu Mountain is covered with perpetual snow, which lies also on the tops of Kaimanawa, Ruahine, and Tararua in the winter. Frosts are heavy in the interior.

Harbours and Ports.

The coasts of Wellington are not so well supplied in this respect as are some other parts of the colony; but what is lost in number is made up in a great measure by the excellence of the chief haven—Port Nicholson—which, from the position it occupies, at the meeting-point, as it were, of the coastal traffic of both Islands, and from its sheltered position and depth of water, may be considered one of the most convenient harbours in the world. The Wanganui River, which has been considerably improved by artificial means, is the second port in the district, and has a considerable trade carried on by coastal steamers. The Patea and Manawatu Rivers are also used by coastal steamers, whilst several other places along the shore afford shelter and stopping-places, according to the direction of the wind. The extension of railways along both coasts has, in a large measure, done away with the inconveniences arising from want of harbours.

Towns.

The capital of the colony—Wellington—is situated in the south-west angle of Port Nicholson, on Lambton Harbour. The wharfage accommodation here is second

to none in the colony, and the wharves present always a busy scene of life with the numerous steamers and sailing-vessels continuously loading or discharging. As many as six ocean-going steamers are frequently seen alongside, loading with wool, frozen meat, and other products, for conveyance to Europe. The port possesses a patent slip at Evans' Bay, within a short distance of the city. Founded in 1840 by the New Zealand Company, the city occupies the flats skirting the original shore-line, long since obliterated by the reclamation of the foreshore, which is now mostly covered with fine buildings. Rising close behind the old shore-line is a range of hills, the lower parts of which are all built over. The population of the city at the present time is about 49,500, including the suburb of Melrose, which now forms part of Wellington. Being the seat of Government, the city contains the residence of the Governor and the headquarters of the Government departments, which are placed in what is said to be the largest wooden building in the Southern Hemisphere. There are several noticeable public buildings, amongst which must be mentioned the Parliamentary Buildings, containing a valuable library, General Post Office, Government Life Insurance Offices, Government Printing Office, Government Railway Offices, Public Library, School of Art, and Harbour Board Offices. The Colonial Museum and the Botanical Gardens are also worthy of notice. The city is lighted by electricity, and its streets are to be paved with wooden blocks, whilst an excellent supply of water is obtained from the Wainui-o-mata River, on the other side of the harbour. The installation of a system of electric trams is proceeding. The principal industries are represented by iron- and brass-foundries, sawmills, soap-and-candle works, boot-factories, aërated water, meat-freezing works, coachbuilding, rope-and-twine works, sash-and-door factories, brick-, tile-, and pottery-works, besides a match-factory and innumerable other smaller works of various kinds. The city is increasing with rapid strides; its excellent position, together with the fine back-country, places it in the front rank of New Zealand towns. Its principal suburbs are Onslow and Karori, containing 1,750 and 1,500 inhabitants respectively.

Petone is situated near the mouth of the Hutt River, seven miles from Wellington, on the railway-line. It has a population of 3,780, and is a rising township, containing the Government Railway Workshops, a woollen factory, and a meat-freezing and preserving establishment. The Lower Hutt, almost immediately adjoining, has also a large population, and some well-built residences with beautiful gardens. The Upper Hutt, situated at the head of the valley, has many small farms, owned by some of the very early settlers. The railway here starts the ascent of the Rimutaka Range.

Featherston, situated at the foot of the Wairarapa Valley, forty-six miles by rail from Wellington, is a small township, with butter- and cheese-factories in the neighbourhood. Roads lead from it to Martinborough and the East Coast, and also down the Wairarapa Valley to Palliser Bay.

Greytown North is situated three miles off the main line of railway, and near the middle of the Wairarapa Valley, fifty-four miles from Wellington by rail. The chief industries are sawmilling and coachbuilding. The population is 1,122 persons.

A few miles further north is the Town of Carterton, where are to be found timber-mills, cheese-factories, &c., and a population of 1,205 persons. There is some splendid farming land in this locality on the banks of the Ruamahanga River.

Masterton is situated at the head of the Wairarapa Valley, on the Wellington-Napier Railway, sixty-seven miles from the capital. It is the centre of an agricultural and pastoral country, and has a population of 3,949. It is lit with gas, and has several industries, such as fellmongery, rope-making, flax-mills, coach-factory, &c., and, in addition, has some excellent fish-breeding ponds, from which many of the rivers in the colony have been supplied with trout. An important coach-road leads from here through a fine pastoral district to Te Nui, and on to Castlepoint on the East Coast, where a large quantity of wool is annually shipped to Wellington for export.

North of Masterton is the Opaki Plain, and beyond is the entrance of the once famous Forty-mile Bush, which is now a thriving pastoral, agricultural, and dairying district. Butter-factories have been established at numerous centres.

Eketahuna is, by rail and road, eighty-nine miles from Wellington. From there a main road leads to Alfredton, and up the Tiraumea Valley, through the East Puketoi country, to Weber, and Dannevirke, on the Napier Railway-line.

Pahiatua, a township eighteen miles beyond Eketahuna, has a resident population of 1,209. It is the county and market-town of a large and improving district, and will probably also become the centre of a large dairying industry. Several branch roads run from Pahiatua into the adjoining country, the principal one leading to Makuri through a beautifully-wooded gorge. From there another branch road passes over the Makuri saddle into the East Puketoi country.

On the West Coast, Pahautanui, at the head of the Porirua Harbour, is the centre of a small agricultural community of early settlers, the old coach-road to the West Coast running through it; and there is a branch-road leading over to Hayward's in the Hutt Valley. Paikakariki, twenty-seven miles from Wellington, may be considered the commencing-point of the West Coast settlements, which are springing up in every available valley along the coast. At Otaki, forty-seven miles from Wellington, by rail and road, there is a township, and a large Native settlement. At Manukau, Levin, and Shannon, thriving townships have arisen since the Manawatu Railway Company opened up the land round about, much of it being rich farming and grazing country. Between Shannon and the Manawatu River there is a large raupo or flax swamp, named Makurerua, containing at least 15,000 acres of fine alluvial soil, which is being gradually drained, and will probably at some future period become grazing-land.

Foxton, a township at the mouth of the Manawatu River, is a small shipping port, containing about 1,200 inhabitants. It is connected with Palmerston North by a branch railway, and is the outlet for a large area of good agricultural land.

Palmerston North is an inland town at the junction of the Wellington–New Plymouth and the Palmerston–Napier Railways, situated on a fine plain in the midst of a most excellent farming district at a point eighty-seven miles from Wellington, and 110 miles from Napier. Its population is now upwards of 7,800. It is lit with gas, and has a good water-supply. A fine bridge across the Manawatu River connects it with the Fitzherbert Block, a tract of rich agricultural land. Nine miles from Palmerston is the Township of Ashhurst, at the mouth of the Pohangina Valley, up which settlement has now extended for a distance of twenty-two miles. Several large farm-homestead association blocks have been selected up this valley.

Feilding, ninety-nine miles from Wellington by rail, with a population of 2,298, is becoming one of the most important towns on the West Coast, as it is the centre of a very fine locality, and the outlet for a large tract of inland country, the forest on which is fast being felled. A coach-road connects it with Birmingham (Kimbolton) and Pemberton, about thirty-two miles distant. On the seaward side for a distance of twenty miles there is also much good agricultural land, extending on the north-west to the Rangitikei River, and including the Township of Halcombe. There are several dairy factories established in the neighbourhood.

Marton, 116 miles from Wellington by rail, with a population of 1,100, one of the earliest of the West Coast settlements, is also the centre of an agricultural country. The Township of Bulls, on the north side of the Rangitikei River, lies between Marton and the coast. From Marton Junction the southern part of the North Island Main Trunk Railway extends up the Rangitikei Valley to Hunterville, a good-sized township in the centre of a grazing district, and from thence as far as Mangaweka, thirty-two miles from Marton, by way of the Makohine Viaduct. A short distance beyond Mangaweka is the viaduct of the same name, 964 ft. long, now rapidly approaching completion. The line is in a well advanced state to Taihape, and it is expected will be opened next year. The construction of the line is proceeding between Taihape and Turangarere. The distance from Marton Junction to the summit at Waimarino is about 104 miles. The coach-road has been made to Turangarere, and from thence to Tokaanu, on Lake Taupo, in the Auckland District.

Wanganui, situated near the mouth of the river of that name, is the oldest town after Wellington, from which it is 150 miles by rail—the distance by sea being only a hundred and twenty miles. It is the centre of an excellent farming district, and

has a considerable trade, and several manufactories. Near the mouth of the river are freezing-works, the meat from which is conveyed by lighters to the large English steamers which lie off the mouth of the river. The town is lit with gas, and has a good water-supply. Not far from it are some extensive railway workshops. Altogether it is a thriving place, with a population of about 7,300. The Wanganui River is navigable for a light-draught steamer up to Pipiriki, a distance of fifty-six miles, and for canoes a further distance of eighty miles to Taumaranui. A branch road extends from Pipiriki through the Waimarino Forest to Ohakune, and on to Karioi on the Murimotu Plains, thence by way of Turangarere and Moawhango to Napier.

Crown Lands available for Future Settlement.

Town Land.—Further sections in Piriaka, Raetihi, Ohakune, Mowhanau, Taihape, Mataroa, and Pongaroa Townships will probably be opened for sale at Wanganui, Pahiatua, and Wellington on dates due notice of which will be given in the local papers.

About 20,000 acres, known as the Retaruke Block, on the Wanganui River. It is proposed to open this under the small grazing-run system during next summer.

Awarua Block.—There is an area of about 101,000 acres purchased by the Crown in this block available for future subdivision and disposal. This area for the most part consists of the rougher portion of the block, and will probably be occupied as pastoral country. It is proposed to offer an area east of Utiku at an early date.

Puketotara, Ahu-ahu, and Te Tuhi Blocks.—These blocks, situated about thirty miles up the Wanganui River, comprise about 35,600 acres, and will shortly be offered for selection as second-class unsurveyed land on optional systems.

Taonui, Maraetana, Pukewhakapu Blocks.—These blocks, which comprise about 12,500 acres, situated between the Mangawhero and Wangaehu Rivers, are now under survey. It is proposed to offer them shortly on optional systems.

Improved-Farm Settlement Lands.

All the available land suitable for holding under the improved-farm conditions has now been allotted, but if any of the sections now held under this system should be forfeited, they will probably be ballotted for amongst applicants in the district who are known to be of good character and likely to make good settlers. If further blocks of suitable land for this system are found, they will be cut up and opened on the same conditions.

Lands Open and Available for Ordinary Selection.

Waitotara.—The Te Ngaue Block, 1,546 acres of second-class pastoral land, is now open for selection in two small grazing-runs.

Waimarino.—A block of about 46,550 acres, on the Retaruke, Oio, and Kaitieke Rivers, has had roads surveyed through it, and portion of it lately surveyed is now open for selection on small grazing-run system. The remainder of this block will shortly be open as unsurveyed land on optional system. 32,000 acres at the head of the Retaruke and Makino Streams have also been roaded. The rest of the Waimarino country, containing about 250,000 acres, is more or less broken, and will probably be opened later on as second-class pastoral country or small grazing-runs, to enable it to be taken up in larger sections.

A number of forfeited sections are now open for selection in the following blocks: Marton No. 3, Marton No. 1, Umutoi, Waimarino, Hunterville No. 2, Dannevirke Centennial, &c.

Tauakira No. 1 Block.—Nine sections, of an area of 10,041 acres, are open for selection on optional systems. This block is situated on Wanganui River, about 28 miles from Wanganui.

Victoria College Endowment Block.—One lot of 2,200 acres is open for selection on the small grazing-run system.

Wanganui River Trust Endowment Block.—This block of 9,733 acres is subdivided into four lots, open for selection on the small grazing-run system.

Mangapapa 1c Block.—One section, 797 acres, is open for selection on optional systems.

Waimarino Block.—An area of 8,100 acres of Crown land and State forest is open for application as a grazing lease for a term of three years.

Rangipō-Waiau-Murimotu Block.—An area of 100,301 acres in this block, subdivided into three runs, is open for selection as pastoral leases under Part VI. of "The Land Act, 1892."

Kaitieke Block.—Nineteen lots, comprising an area of 10,218 acres, are open for selection on the small grazing-run system.

Ohotu Block.—Seventy-one lots, comprising an area of 57,455 acres of Maori land, about forty-five miles up the Wanganui River, in the Ohotu Block, have been offered for selection for terms of twenty-one years with right of renewal. Particulars as to the lots still open can be obtained from the President, Aotea Maori Council, Wanganui.

Pipiriki Township.—Leases of several forfeited allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, will be open for application by tender shortly.

Tokaanu Township.—Leases of ninety-nine allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, are open for application by tender.

Potaka Township.—Leases of forty-four allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, are open for application by tender.

Hokio Township.—Leases of forty-seven allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, are open for application by tender.

Wharangi (Foxton Sanatorium).—Leases of twenty-three allotments for the term of fourteen years are open for application by tender.

Tongariro, Rangipopo, and Kaimanawa Blocks.—105,000 acres have been acquired by the Crown, but none of it is likely to be taken up for settlement for a long time to come.

"Crown Land Guides" and sale lithographs, giving full particulars of lands open for selection in this Land District, will be forwarded to any one on application to the Commissioner of Crown Lands, Wellington.

Native Lands.

Townships are now surveyed at Pipiriki, Tokaanu, Parata, Potaka and Hokio; sections in all of which are open for leasing under "The Native Townships Act, 1895."

The allocation of the Crown's purchases in the Raketapauna, Rangiawaea, Tupapanui, Puketotara, Ahuahu, Pukewhakapu, Maraetana, Taonui, Motukawa Nos. 1 and 2, Te Tuhi Nos. 1, 2, 3, and 4, has been made by the Land Court; and the surveys of the land allotted are in hand, and they should be available for settlement soon after the surveys are completed.

The blocks under lease to Europeans contain about 374,700 acres, the principal being the Owhaoko, Mangohane, and Ruanui, occupied by Mr. Studholme; and the Oroumatua, leased to Mr. Birch. Of others passed through the Native Land Court there are about 562,415 acres which are fit for settlement, the principal being the balance of the Awarua and the Motukawa, Raketapauma, Te Tuhi, Ahu-Ahu, Rangiwaea, and Puketotara Blocks in the central district; Raetihi in the Waimarino district; Tauakira and Ohotu, on the Wanganui River; Tupapanui, Maraetaua, Taonui, and Kaha-kaha, between the Wanganui and Wangaehu Rivers. Those not suitable for settlement at present are the Te Hautu, Ohuanga, and Kaimanawa, on the east side, and the Oahukura on the west side, of Tongariro Mountain, containing an area of about 345,000 acres.

The Native lands which have not passed the Native Land Court contain an area of about 130,000 acres, the principal being the Mairekura, Okehu, Tawhitinui, and Papahaua Blocks, on and between the Wangaehu and Wanganui Rivers, and some others on the west side of the latter river.

Pastoral and Agricultural Industries.

The pastoral industry is by far the more important, the total area in grass in 1903 being 2,600,629 acres as compared with 102,714 acres under crop, garden, or orchard. Of the area in crop, 5,969 acres were in wheat, 27,884 in oats, and 38,520 acres in turnips or rape, the rest being in potatoes or other crops.

The following figures will show the average return per acre of grain, for the year 1903: Wheat, 36·79 bushels; oats, 42·13 bushels; barley, 35·44 bushels.

The area in sown grass now exceeds that in any other district in the colony, though the area under crop is very small as compared with either the Otago or Canterbury Districts. In April, 1902, there were 4,222,510 sheep; and in October, 1902, the cattle numbered 315,869, and horses 46,038. The total area in gardens is given as 2,317 acres; in orchards, 3,703 acres; and in plantations, 3,982 acres.

Dairy Industry.

Both soil and climate are well adapted for the production of butter and cheese, and hence we find creameries and butter-factories increasing in number very considerably each year, and the export constantly augmenting.

Forty-eight butter and cheese factories were returned in September, 1902, as at work in the Wellington Provincial District.

Phormium Tenax.

The principal flax-mills working are at Featherston, Carterton, and Martinborough, in the Wairarapa, and at Foxton on the West Coast. This industry fluctuates greatly, in accordance with the price ruling for the dressed article. In 1901 twenty-five mills were at work, employing 580 men and 25 boys; the machines driven by water-wheel or engine working up to 365-horse power.

Timber Industry.

Sawmills are to be found in different parts of the district where the means of communication are sufficient, the timbers cut being principally totara and red pine, both of which are largely used in house construction and other works. Others of the native woods are very beautiful, but are utilised only to a small extent.

The principal mills are at Pahiatua, Eketahuna, Masterton, and Carterton, in the Forty-mile Bush and Wairarapa districts, and at Levin on the West Coast. besides which there are several mills in Wellington for dressing the rough material, In the whole district there were in 1901 sixty-six mills, of an aggregate of 1,114-horse power, engaged in this industry, employing 1,114 hands, the output of sawn timber being 41,375,471 ft., and the total value, including posts and rails, resawn timber, doors, sashes, &c., £210,589, which, next to Auckland, is the highest for any provincial district in the colony.

Miscellaneous Industries.

The numbers of the other principal industries in this provincial district, as given in Census, 1901, were as follow: Meat-freezing and preserving works, 5; ham and bacon curing establishments, 3; fish-curing works, 4; grain-mills, 8; sugar-boiling and confectionery works, 4; breweries, 10; aerated-water factories, 24; sauce and pickle factories, 5; soap and candle works, 4; cooperages, 4; woodware factories, 5; gasworks, 6; brick, tile, and pottery works, 18; tinware factories, 13; iron and brass foundries; 13; printing offices, 40; basket and perambulator factories, 6; coachbuilding and painting works, 44; cycle-factories, 10; saddlery and harness factories, 29; tanning, fellmongering, &c., establishments, 14; sail and oilskin factories, 4; furniture and cabinet-making, 36; tailoring establishments, 67; dressmaking and millinery, 78; shirt-making, 7; boot and shoe factories, 24.

THE MARLBOROUGH LAND DISTRICT.

C. W. ADAMS, Chief Surveyor.

Boundaries.

The Marlborough Land District, occupying the north-east corner of the Middle Island, and containing about 2,635,000 acres of land, is bounded generally on the north and east by Cook Strait and the East Coast as far as the Conway River; thence by that river to its junction with the Towy River; from this point, by straight lines, rivers, and the summits of watersheds to the western side of Tennyson Inlet, Pelorus Sound. From the Conway to the Acheron River it abuts on to the Canterbury Land District, and from that river to Pelorus Sound it is bounded by the Land District of Nelson.

The widest part of the district is from Cape Campbell to Tophouse, a distance of about sixty-seven miles, and the extreme length from Cape Jackson to the Conway is 120 miles.

Physical Features.

The district throughout is generally mountainous, but none even of the highest peaks are covered with perpetual snow, although Tapuaenuku, the highest of the inland Kaikouras, attains an altitude of 9,462 ft. Of the Seaward Kaikouras, or Looker-on Mountains, the highest points are Kaitarau and Whakari, which are 8,700 ft. and 8,500 ft respectively. There are several lesser peaks, from 4,000 ft. upwards.

The view from Kahautara Bluff, south of Kaikoura Settlement, looking northwards, when the Looker-on Mountains are snow-capped, is said to be one of the finest in New Zealand.

Geologically, the district may be briefly described as follows: North of the Wairau River the rocks belong chiefly to the Upper and Lower Devonian series, with a belt of Silurian between them, embracing the country along the west of Queen Charlotte Sound to Cook Strait. Within these series auriferous deposits are found, and at present worked at Mahakipawa, Wakamarina, and Wairau Valley. In Endeavour Inlet an antimony-mine was worked for some time. But operations have been discontinued and the machinery removed. The country south of the Wairau River may be said to belong chiefly to the Carboniferous Age, with patches, along the coast and up the Clarence Valley, of Cretaceo-Tertiary and Lower Greensand formations; while along and between the Awatere and Clarence Rivers volcanic formation and numerous intrusive dykes occur. The Red Hills also, at the head of the Wairau Valley, are of volcanic origin.

Coal has been discovered in the neighbourhood of Picton, and in the Clarence Valley, but none has been as yet successfully worked within the district. A narrow belt of Tertiary limestone, suitable for building purposes, extends, with small interruptions, from Cape Campbell to the boundary of the Canterbury Provincial District. The Marlborough land may be divided into three classes: Open land, generally covered with associated grasses; forest-land; and intermediate, or land partly forest, partly covered with scrub, fern, or other rank vegetation. This original condition of the soil naturally gave rise to a localisation of industries, and a very unequal distribution of settlement. Thus the open country was taken up for pastoral purposes; in the forest country the timber industry was developed, and the intermediate land passed into the hands of farmers. Though agriculture is now extending into the pastoral and forest country, and considerable areas of forest-land have been cleared and laid down in grass, the portions of the district characterized by these respective industries are still well defined.

In the northern part of the district, bounded by Cook Strait, numerous deep fiords and bays run far into the land. The principal of these are Pelorus and Queen Charlotte Sounds, Tory Channel, Port Underwood, and Port Gore.

These Sounds are very picturesque, but the hills surrounding them are not so rugged and precipitous as are those of the thirteen celebrated Sounds on the west coast of Otago and Southland.

Though generally steep, the land is not too rough to be used for pastoral purposes, and nearly all the land in the Sounds is occupied by thriving settlers.

Pelorus Sound, the most extensive and picturesque, is thirty-four miles long, following the course of the main channel, with the Town of Havelock at its head. There are many bays and inlets branching off in all directions; the largest of these is Kenepuru Sound, fourteen miles long. Pelorus Sound, including its branches, has a shore line of over 300 miles in length, not counting islands.

Queen Charlotte Sound is the next in length, being thirty miles from its entrance to its head; it also has many bays and inlets, one of which is Picton Harbour, twenty-five miles from the entrance.

Tory Channel is ten miles long, and forms the most direct line of communication between Picton and Wellington. The distance from Wellington Wharf to the entrance of Tory Channel is about forty miles, and about twenty more to Picton.

The shore-line of Queen Charlotte Sound and Tory Channel is over 200 miles in length. The entrance of Queen Charlotte Sound is about twenty miles distant from that of Pelorus Sound, and this latter is about twelve miles from the French Pass. Generally there is deep water in all the sounds and bays, and good anchorage can be found near the shore. The country is hilly everywhere in the neighbourhood of the Sounds, the highest point being Mount Stokes, 3,951 ft. above sea level.

Rivers.

Four considerable rivers, the Wairau, Awatere, Clarence, and Conway, rise towards the western boundary of the district; the two former, running east and north, fall into Cook Strait; the two latter, taking a southerly and easterly course, discharge into the sea on the eastern side of the Island. These rivers water large and fertile valleys, but none can be entered by vessels except the Wairau, which is navigable for small steamers for about ten miles from its mouth.

Plains.

The Wairau Plain, containing about 65,000 acres, on which stands Blenheim, the capital of Marlborough, is the principal block of agricultural land within the district. The soil, generally good, is, on the lower or seaward side of the plain, extremely fertile, especially in the neighbourhood of Tua Marina, Spring Creek, and near Blenheim, which is surrounded by numerous gardens, with rich deep mould, and well sheltered with trees. The average yield of wheat for the plain is about 25 bushels per acre; of oats and barley, 35; of peas, 30; and of potatoes, 10 tons per acre. Hops have been successfully grown for many years in the neighbourhood of the town, but, owing to the high price of labour, their cultivation has not extended. The plain, traversed in all directions by good macadamised roads, and dotted over with numerous comfortable homesteads, standing in clumps of trees amidst well-cultivated fields, has already an old-world appearance. More than half the population of the Marlborough Land District—about 13,000, according to the last census—is centred in the Town of Blenheim and on the Wairau Plain. Besides this plain there are several thousand acres of terrace flats and valleys along the larger rivers, notably at Starborough, on the Lower Awatere.

Lakes.

There are not any lakes worthy the name. The largest is Kapara te Hau, more familiarly known as Grassmere, situate on the coast between the Awatere River and Cape Campbell. It is about three miles in diameter, and very shallow, being, indeed, no more than a lagoon, as during a dry season there is little or no water in it.

There are two other lakes of small size, viz.,—Lake Elterwater, four miles south of Lake Grassmere, and Lake McRae, situate in the open country between the Awatere and the Clarence Rivers.

Forests.

The portion of Marlborough north-west of the Wairau River, extending to the boundary of the Nelson Land District, and including the County of Sounds, in all about 280,000 acres, was originally covered with dense forest. In the valleys and on the lower hill-slopes, rimu, kahikatea, matai, totara, miro, and tawa were the principal forest-trees. The higher portion of the hills and steep spurs are clothed with the various species and variety of birch (beech), to which along the shores of the Sounds were added pukatea and kohekohe, the latter locally called cedar.

Since 1860 sawmills have been at work in various parts of the district. Thirty-two mills have been erected, and have worked for longer or shorter periods. Havelock, on the Pelorus Sound, is at present the headquarters of the timber trade.

The hills along the shores of the Sound will, for many years, furnish birch sleepers. There are other timbers left in places, but nowhere sufficient to justify the erection of a mill, unless pukatea wood, hitherto neglected, could be utilised. It is a light, tough timber, well adapted for boat-building and for packing-cases. The quantity of pine timber remaining in the Kaituna and Onamalutu Valleys is small, but there is a good supply of birch and other wood, suitable for fencing and firewood. On these valleys the Wairau Plain is mainly dependent for timber.

The Pelorus Valley, with its tributaries the Wakamarina, Rai, Ronga, and Opouri Valleys, still contain about 300,000,000 ft. of convertible timbers, exclusive of the birch, of which there is a large amount of the best quality on the hills and terraces. The Wairau, Blenheim, and other districts extending southwards must depend for the future on this source for all their building material.

In the neighbourhood of Kaikoura, along the base of Mount Fyffe, and in the Hapuku Valley, there is another small block of forest-land in which three small sawmills have been erected. The quantity of timber suitable for sawmill purposes in this block is very limited, but it will furnish the neighbouring country with firewood and fencing for many years.

Soils and their Uses.

The Wairau Plain, which is the principal block of agricultural land, has been already dealt with. The second agricultural centre is in the neighbourhood of Kaikoura. The land extending along the base of Mount Fyffe, between the Kohai and Hapuku Rivers, about 13,000 acres in extent, is held in small or moderate-sized farms; the soil is good, the block known as "The Swamp," between Mount Fyffe and the Peninsula, being particularly rich. In the Pelorus, Kaituna, and Onamalutu Valleys, and in the Sounds, settlers following in the wake of the sawmills have already converted much of the land worked over into grazing-farms. The land is of three descriptions—alluvial flats, terraces, and hill-sides. On the flats in the larger valleys the soil is rich, producing heavy crops of oats, peas, beans, and potatoes, wherever it has been brought into cultivation. The terrace-land varies much in quality, but generally grows good grass, as do also the hills on which tawa formerly grew; the birch country being very barren. On the small bush-farms cattle-grazing is the chief pursuit. Out of 12,000 head kept in Marlborough, 4,300 belong to the forest country.

Grazing.

About 1,680,000 acres of the Marlborough Land District are at present devoted to keeping sheep. The leaseholds in the northern parts of the district contain a large extent of scrub- and fern-covered country, now producing little or no food for sheep, but capable of improvement. The total number of sheep depastured is 849,168, distributed as follows amongst the counties into which the land district is divided: Marlborough County, 522,783; Sounds County, 164,657; Kaikoura County, 161,728. On the natural pasture of the open country merino sheep are kept almost exclusively, the land carrying from half to one sheep per acre. In the forest country, on sown grass, the land keeps from two to four crossbred sheep per acre. Along the shores of the Sounds large areas of hill-land have been taken up on lease, and are now being cleared and laid down in grass expressly for keeping sheep, but generally throughout the forest country the holdings are small or of moderate size; hence this is, after the Wairau Plain, the most populous portion of the district.

Industries.

Gold-mining has been carried on for some years, principally at Mahakipawa, Wakamarina, and Wairau Valley. At present not much gold is being obtained.

One dredge is at work in the Wakamarina River, with satisfactory results; but the two at Top Valley have suspended operations—the returns not being payable—and one of them is being removed to Armchair Creek.

Twelve sawmills are at work within the district: one at Kaikoura, and the others in the Pelorus, Kaituna, Onamalutu, and Wakamarina Valleys, and in the Pelorus and Queen Charlotte Sounds. The principal one is Messrs. Brownlee and Co.'s, in the Pelorus Valley, their tramway being some fifteen miles long, the output last year being about 3,142,000 ft. Messrs. Brownlee and Co. have sixty men employed, and keep two vessels running between Havelock and Lyttelton.

During the year the flax industry employed eleven mills, and the quantity of hemp shipped was 1,300 bales and 570 bales tow.

There are three flour-mills at work, two of them being owned by Messrs. Redwood Bros. The one at Spring Creek is a complete roller-mill, driven by water-power, and can turn out about 14 tons of flour in twenty-four hours. It is electric-lighted, and the sack-working machinery is driven by electric motor. The other two mills are in the Town of Blenheim; one is worked by water-power and the other by steam.

There is a dairy factory at Spring Creek which contains all the latest improvements in machinery; 19 tons of butter were produced in 1902.

There is a first-class cheese-factory at Tuamarina. Last season 82 tons were turned out. There are also cheese-factories at Kaikoura and Havelock. The latter had an output of 52 tons.

Climate.

Marlborough possesses one of the finest climates in the world; and at Blenheim it is fine weather nearly all the year round. There is almost a total absence of the boisterous winds that so frequently visit Wellington.

The original distribution of the open and forest lands was entirely due to climatic causes. At Cape Campbell, one of the barest places in the district, the annual rainfall is only 23·25 in.; in the Pelorus Valley, the centre of the forest country, it is over 65 in. This difference between the climates of the north-western and south-eastern portions of the district explains why the artificial pasture-land, when compared with the natural pasture, supports such a large amount of stock. Winter and spring are the wettest seasons, hence the dry climate is not unfavourable for agriculture. Wherever the soil is suitable, crops sown in winter and harvested in early summer can be successfully grown. Everywhere near the coast the range of temperature, considering the latitude, is very small. The thermometer seldom falls below 30 deg., or rises above 78 deg. Along the shores of the Sounds the mildness of the winter, owing to the curious distribution of land and water, allows lemons, oranges, passion-fruit, figs, and other sub-tropical fruits to be grown in favourable situations. On the lower hills and terraces of the forest country the chestnut (*Castanea vulgaris*) grows rapidly, and commences to bear fruit in five or six years. A few trees planted in the Pelorus Valley some twenty years ago are now yielding annually about 2 cwt. of nuts a tree. In all parts of the low country the common English fruit-trees—apple, plum, pear, cherry, &c.—yield abundantly, the fruit, owing to the clearness of the atmosphere, being of excellent quality. In the high country, where snow falls occasionally during winter, red, white, and black currants can be produced in such quantities that with little labour they might be made an article of export to the warmer parts of Australia.

Towns.

The chief town, Blenheim, is situate on the Wairau Plain, at the junction of the Opawa and Omaka Rivers—a third river, the Taylor, would join at about the same point were it not that when not in flood it disappears beneath the surface, about three miles south of the town. Blenheim has been termed a miniature Christchurch, doubtless from its extreme flatness. Considering this, its streets are not so

straight and wide as they should be. The Government Buildings, which comprise the Post and Telegraph Offices, Lands and Survey Offices, Courts of Justice, &c., form a handsome edifice in the centre of the town, which is well planted with deciduous and evergreen trees. It is about eighteen miles and a half from Picton by rail, and about twelve miles from the sea by the Opawa River, which is navigable for small steamers. Blenheim is lit by gas, and is supplied with water principally by artesian wells. The population is 3,222.

The next town in importance is Picton, the principal port, only fifty-three miles by sea from Wellington. This little town, both in position and appearance, may be said to be the antithesis of Blenheim, being most picturesquely situated at the head of Queen Charlotte Sound, and nestling among hills, some of the higher ones still densely covered with birch and other forest. There is frequent communication with Wellington and Nelson by steamers averaging 500 tons, and vessels of large size can lie at the wharf at low-water. The direct exportation of frozen meat from Picton commenced in 1892, when 16,433 carcases were shipped. The Christchurch Meat Company exported from Picton for the year ended 31st March, 1903, mutton, 41,705 carcases, and lambs, 37,617 carcases. Picton possesses a malting establishment also, producing for export, as the excellent quality of the barley grown on the Wairau Plain insures a ready market. A small quantity of oysters, mostly procured in Queen Charlotte Sound, is annually exported from Picton; with culture the supply might be almost indefinitely increased, many of the sheltered bays in both sounds being well adapted for the purpose. What is now being done along the Marlborough coast is a mere trifle compared with what might be accomplished if capital and knowledge were brought to bear on the fishing industry. Around the whole coast, from the mouth of the Conway to near the French Pass, the sea abounds in fish. Within the Sounds and amongst the islands of Cook Strait, hapuku, schnapper, moki, barracouta, raturi, kahawai, and rock-cod are extremely plentiful. Immense shoals of the southern herring (*Clupea sagax*) and of anchovies (*Engranlis encrasicholus*) frequent the inlets at certain seasons of the year, and quantities of fresh fish are exported from thence to various places within the colony. As steamers arrive at and leave Picton almost daily, shipments can be made without delay to all parts. Picton possesses a good gravitation water-supply. Its population is about 900 persons.

Havelock, situate at the head of Pelorus Sound, is, as has been already stated, the present headquarters of the timber trade, Messrs. Brownlee and Co.'s steam saw-mill, at the mouth of the Pelorus River, being only a mile or so from the town. Between Picton and Havelock there is a mail-service twice a week, *viâ* Cullensville, on the Mahakipawa Goldfields. The population of Havelock is about 300 persons.

The Town of Kaikoura, the greater part of which is built on a raised shingle-beach, is situate at Kaikoura Peninsula, near the southern boundary of the district. The town, with the adjoining settlement of small farms, forms one of the most picturesque spots in New Zealand, lying as it does under the Seaward Kaikouras, or Looker-on Mountains. At the back of the town the peninsula, which is composed of Cretaceo-tertiary limestone, rises abruptly for about 100 ft., and affords splendid sites for dwelling-houses. Kaikoura is connected with Blenheim by a weekly coach service, the distance being about ninety-five miles. There is also direct steamer communication with Wellington and Lyttelton. The population of the town is about 500.

Roads and Railways.

The only railway is that between Picton and Seddon, a distance of thirty-three miles and a half. Three trains run daily between Picton and Blenheim, about eighteen miles, and one train between Blenheim and Seddon on five days in the week. A substantial railway and traffic bridge over the Awatere River, costing £22,500, is a very great boon to the district.

The Main North Road to Nelson, distant seventy-eight miles, is a good metalled road nearly the whole way. It runs up the Wairau Valley from Blenheim for about six miles, crosses the Wairau River into the Kaituna Valley, which it follows as far as Havelock—about twenty-eight miles. It then runs up the Pelorus and Rai Valleys, and ascends by easy gradients to the Brown Saddle, where it crosses the

boundary into Nelson. An excellent coach-service—probably the best in the colony—has been established for some years, the coach running to and from Nelson on alternate days, covering the distance in eleven hours, and another coach-service twice a week has been established between Blenheim and Havelock.

The Main South Road, running over the Taylor Pass into the Awatere Valley, and through the Starborough, Flaxbourne, Kekerangu, and other properties, connects Blenheim with Kaikoura and the south, and is a good road during dry weather, although it might be much improved in places. Since the acquisition of the Starborough Estate by the Government the bulk of the traffic now goes *viâ* the Redwood Pass, as it is a more direct route to the town of Seddon.

The portion between the Clarence River—over which a fine bridge was built some years ago—and the Hapuku River runs along the coast under steep and picturesque hills covered with forest. A road to the south of Kaikoura, between the Kahautara and Conway Rivers, is now completed and forms part of the main Cheviot–Kaikoura Road, and, besides its great usefulness in opening up the country through which it passes, will also become a favourite route for tourists, as in many places it passes through most picturesque scenery.

A good road has been formed up the Wairau Valley, passing through the Bankhouse, Erina, Lansdowne, Hillersden, and Birch-hill properties, and connecting with Tophouse, just outside the boundary, and distant fifty-six miles from Blenheim. At Tophouse there is an hotel and a telegraph-station, and thence a good road leads to Belgrove, on the Nelson Railway line.

A coach runs twice a week between Blenheim and Wairau Valley—twenty-five miles—where there is an hotel, a post- and telegraph-office, and one or two stores.

There is also a good cart-road running up the Awatere River—which it crosses and recrosses several times—as far as Molesworth Station, about seventy miles from Blenheim. Between these points there is a weekly coach and mail service.

There are other minor roads and bridle-tracks throughout the district too numerous to specify.

Crown Lands.

The area of Crown lands at present available for settlement is about 140,000 acres, but of this area 100,000 acres are of very poor quality, being chiefly the summits of high, rugged country. The balance of available area lies principally in the Pelorus, Rai, and Wakamarina Valleys, and in the Sounds, and will doubtless be readily taken up when thrown open for selection.

THE NELSON LAND DISTRICT.

W. G. MURRAY, Chief Surveyor.

General Physical Features.

The Nelson Land District comprises the north and north-western portion of the Middle Island, the greater part being high and mountainous, and on the western and inland ranges covered with dense forest to the bush-limit, at from 4,000 ft. to 4,500 ft. Cape Farewell, the northernmost point, is situated at the western entrance of Cook Strait, on the south side of which lie Golden or Massacre Bay, and Tasman Bay, more commonly called Blind Bay. The former derives its name from the massacre of a boat's crew belonging to Tasman, who visited it on the occasion of his discovery of New Zealand in 1642. At the head of the latter, which has a depth of fifty-four miles from its entrance, stands the town of Nelson. From Separation Point, on the western side of Blind Bay, a range of mountains from 3,000 ft. to 4,000 ft. in height extends southward to Mount Murchison. It consists of a granitic formation, with slate, limestone, and sandstone belts. From Pelorus Sound, on the east, commences another range—a portion of which is serpentine, forming a mineral belt immediately south of Nelson City. It reaches an elevation of 6,000 ft., and runs in a south-westerly direction to the St. Arnaud Range, terminating in the Spencer Mountains, a large central mass attaining a height of

8,000 ft. above the sea-level. To the westward of the Spencer Ranges and those on the further side of Blind Bay are the Brunner, Lyell, Marine, and Tasman Mountains, from 5,000 ft. to 6,500 ft. in height. Still further westward along the coast are the Paparoa, Buckland Peaks, and Papahaua Mountains, about 4,500 ft. at their highest point, and the Whakamarama Range, extending from Rocks Point to Cape Farewell. There are also a number of isolated mountain-masses here and there through the district.

The inland Spencer Mountains are the source of the principal rivers of the district south of the Buller River, and are thus described by the late Sir Julius von Haast: "On the southern slopes of this wild alpine-stack we find the principal sources of the Grey, or Pohaturoa; on its north-east side the sources of the Wairau; on its eastern side those of the Acheron and Clarence; and in the deep recesses of these snow-clad giants those of the Waiau-ua, or Dillon: so we may say that, with the exception of the Takaka and Aorere, which fall into Massacre Bay, the Wangapeka and Motueka, which run into Blind Bay, the Karamea and smaller streams, which reach the sea on the West Coast to the north of the Buller River, all the rivers of any size in the northern part of this island take their rise in this magnificent chain."

Rivers.

The Buller River (Kawatiri) has its source at a point about sixty miles south-west from Nelson, where it flows out of the beautiful alpine lake Rotoiti, lying 1,800 ft. above sea-level at the foot of the lofty St. Arnaud Range. This river breaks through the massive mountain chains of the interior in a transverse or easterly direction, forming, where it receives no tributaries, a succession of magnificent rocky gorges, and, after a course of about one hundred miles, finally discharges its waters into the ocean on the West Coast. The Gowan River, a tributary, has its source in another exquisite lake, Rotoroa, 1,623 ft. above sea-level. Other tributaries of the Buller are: the Matakitaki, Maruia, Owen, Matiri, and Inangahua, all of which take their rise in the snowy ranges.

Lakes.

The lakes of the district are alpine in character, surrounded by grand mountain and bush scenery. The principal are: Rotoiti, lying east, and Rotoroa south-east, of Mount Murchison; Matiri, to the west of Owen Range, 980 ft. above the sea.

Plains.

The Waimea Plains, near Nelson, with the Lower Motueka, Riwaka, and Takaka Valley lands, formed part of the original settlement of the New Zealand Company, and are occupied mostly by small settlers. Inland are the Tiraumea Plains, 1,100 ft. above sea-level, and the Maruia, 1,300 ft. These are, together, about 30,000 acres in extent. They are surrounded by high mountains heavily timbered, and the land is of only second-rate quality. On the West Coast the level lands are Totara Flat and Ikamatua Plains, Mawhera-iti, and Inangahua Valleys, lying on the eastern flanks of the Paparoa coastal range. There are also open *pakihi* at Addison's Flat, on the south side of the Buller, and low swampy lands on the north side; northward is the heavily timbered country of the special settlement at the mouth of the Karamea.

Forest.

The area of the District is estimated at 4,686,000 acres, of which the open land under 2,000 ft. in altitude is, approximately, 915,000 acres; the area of forest-land under 2,000 ft., about 1,382,000 acres; and the open land above that altitude, about 581,000 acres, inclusive of bare mountain summits. The wooded country is estimated at 3,200,000 acres; of this area probably about 900,000 acres is scrub and stunted bush; and of the remainder, not 700,000 acres at the outside would be available for clearing. The timber on the western side consists of red- and white-pine, matai (or black-pine), totara, kawhaka (or cedar), rata, and occasional silver-

pine, besides black- and red-birch (*Fagus fusca*). These varieties are also found, but in smaller areas, on the eastern side; birch preponderating. A large amount of timber is used in the mining industry for props and planking, and throughout the districts generally for shingles, fencing, firewood, sleepers, &c.

Agricultural.

On the Waimea Plains is grown excellent barley, a small quantity of which is exported. Oats and chaff are sent in large amounts to the West Coast and elsewhere. Hops also form one of the chief exports. Wheat, maize, rye, and root-crops of most varieties are grown, and fruit is plentiful. The weekly wage of a farm-labourer is 20s. with board; without board he would receive 6s. a day. Ploughmen can get 20s. per week with board; without, 7s. 6d. a day.

Pastoral.

The total area of pastoral lands held under the Crown by 77 tenants on the 31st March, 1903, amounted to 317,060 acres. As the agricultural land is limited, settlers are turning their attention to the timbered mountain-slopes for grazing purposes. These, when the timber is felled and burnt, and the ground sown with suitable grass, will, after three to four years, carry about two sheep to an acre on fair soil, and more on the limestone country. The cost of felling and burning green timber is from 15s. to 20s. per acre; cost of mixed grass-seeds and sowing, about 15s. per acre; and a good paling-fence on ordinary bush-lands with double No. 8 wires at top and bottom, with ½ in. palings and 7 in. posts sunk 2 ft. in the ground, can be erected at about 12s. per chain.

Mining.

The western side of the Nelson District was a *terra incognita* till about the year 1863, when gold was first discovered in large quantities. Miners flocked in at first from the other goldfields in New Zealand, then from Australia, California, and other parts of the world, until in 1865 the whole coast-line was peopled from Broken River in the north to Jackson's Bay in the south. Mining, at first altogether alluvial, developed into quartz-reefing, and hydraulic-sluicing of large areas. The agricultural lands about the Grey and Inangahua were taken up and cultivated; and, as mining became a more settled industry, the miners occupied and tilled the non-auriferous alluvial flats in the many valleys: hence at the present time a number of homesteads are scattered throughout the district.

Reefton and its neighbourhood forms one of the chief quartz-mining districts in New Zealand; and the West Coast, including Westland, has produced about 45 per cent. of the total gold raised in the colony. The oldest alluvial field is at Collingwood. Among other minerals found in the district are: silver, copper, chrome, antimony, manganese, and hæmatite. Extensive deposits of coal are found on the West Coast, within the areas of the Grey and Buller Coalfields Reserves. Coal is also found in Collingwood, in Blind Bay, and in West Wanganui Inlet; and there are numerous smaller areas of coal-bearing strata here and there throughout the district. The output from the mines at work within the district during the year ending 31st December, 1902, was 537,222 tons. Copper-ore is found in a serpentine rock-formation near Nelson, but the companies which have worked the ore have not hitherto been successful—the last one, "The Champion," failing from want of sufficient capital. Deposits of chrome-ore are also found here. Silver-ore has been worked in the Collingwood District; and at Parapara, in Blind Bay, there are widespread deposits of hæmatite iron-ore, combined with limestone and coal, waiting only for capital to develop them. It will be readily gathered from the above brief description that mining is the chief industry of the Nelson District. A great many river and beach-dredging claims have been taken up, and in many instances a large amount has been expended in the purchase and erection of dredges. A high degree of ultimate success in these ventures is looked for.

Sawmilling, &c.

The timber industry in this district has now become an important trade. There are thirty-eight sawmills working, and during the past year about 9,000,000 ft. of various kinds of wood, principally red- and black-pine, have been cut in this district for export, and silver-pine has been largely in demand for railway-sleepers for home consumption.

A small industry in flax is also carried on.

Towns.

The chief town is Nelson, situated at the head of Blind Bay, in 41° 16′ S., and surrounded on all sides, except the north, by mountains reaching an elevation of 3,500 ft. With a mean temperature of 54·8° Fahr. it possesses a climate almost unequalled for its beneficial effects on invalids suffering from pulmonary diseases. There are many picturesque spots in the suburbs, and the city itself, with its cleanly-looking buildings and well-kept gardens, is one of the most charming spots in New Zealand. There is an old-established Boys' College, a High School for Girls, and a School of Music, besides Government and other schools. The Anglican Pro-Cathedral, built on the summit of a central hill, memorable as being the site of fortifications erected in the early days of the settlement for defence against an expected attack of the Natives, is a striking feature. The Roman Catholic Church, Convent, and school-buildings cover a large extent of ground. There is also at Stoke, a small village three miles from Nelson, a central Catholic Orphanage, surrounded by grounds of considerable area. There is a good supply of excellent water from a reservoir in the hills at the back of the town, and the streets are well lighted with gas. The several Government departments are housed in one roomy building, containing a large hall used for Supreme Court sittings and other public purposes. The principal industries are represented by iron foundries, fruit preserving and canning works, breweries, biscuit-factory, coachbuilding, sawmills, and sash and door factories, boot factories, and many other small works. Nelson has a small natural harbour, formed by a boulder-bank running for eight miles parallel to the shore, deep enough at high tide to admit vessels of 1,000 tons burden. It is a port of call for the Union Steamship Company's coastal steamers, and has a small local fleet plying between the West Coast, Blind Bay, Picton, and Wellington. The town is reached from the eastward by a good main road from Marlborough. A railway-line has been constructed up country to the southward for thirty-one miles to Motupiko, passing through the farming villages of Stoke, Richmond (borough), Brightwater, Wakefield, Foxhill, and Belgrove, and is being extended for a further distance of ten miles, crossing the Motueka River by means of a combined railway and traffic bridge, and proceeding up the Tadmor Valley as far as Tadmor Settlement. The section will probably be open for traffic within a year. Leaving for the West Coast by a good main road, the traveller starts from the Motupiko Station on one of Cobb and Co.'s coaches, and proceeding up the Valleys of the Motupiko and Clarke, crosses the Hope saddle and thence down the Hope Valley to its junction with the Buller, about sixty-seven miles from town. He then enjoys a succession of views of mountain-gorge scenery, and, after traversing a gorge of seventeen miles in length, arrives at the Lyell, 107 miles from his starting-point. This is an alpine township, in a small quartz-mining neighbourhood. Here is a fine lattice-girder bridge, spanning a rocky gorge of the Buller, and springing boldly from a bluff on the northern side. It is about 347 ft. long, two of the spans being 108 ft. and 168 ft. respectively. The roadway is 100 ft. above the river-bed. At 116 miles the junction of the Inangahua with the Buller is reached, the main road continuing to Reefton, with a branch road twenty-eight miles to Westport, which for twelve miles passes through some of the grandest river-gorge scenery in New Zealand.

Westport, the town next in importance to Nelson, is situated at the mouth of the Buller River. The harbour is sheltered from southerly gales by Cape Foulwind and its outlying rocks, and is accessible in nearly all weathers. A large sum has been spent on a system of harbour-works, designed by the late Sir John Coode. Westport is the place of shipment for the coal-mines lying northward as far as the Mokihinui

River. The character of this coal for steam purposes stands almost unrivalled. The long line of coal-staiths and wharves on the northern bank of the river, with a fleet of steam-colliers loading alongside, does not fail at once to impress a visitor with a sense of the importance of the trade. Though much has already been done, yet the industry, from the extent of the coal-bearing strata, is capable of much larger expansion when the necessary capital can be found. The Westport–Mokihinui Mine Railway connects with the mines and conveys the coal to the port. At the foot of the Mount Rochfort plateau, nine miles from Westport, is Waimangaroa, and on the plateau itself is Denniston—both coal-mining villages. The latter, built at an elevation of 1,960 ft., is said to be the highest township in New Zealand. On a clear day it is well worth a visit, for the sake of enjoying the magnificent panoramic view of the southern Alps, which reach their highest point in Mount Cook, 12,349 ft. high, about 100 miles south. South of Westport are the alluvial gold-mining centres of Addison's Flat, Croninville, Nine-mile Beach, and Charleston.

Motueka is a thriving town situate near the mouth of the Motueka River. It is the centre of a considerable agricultural and fruit-growing district. It has two bacon-factories, fruit pulping and canning works, and dairy factory.

From the Inangahua Junction, the main road continues southward through the Inangahua Valley, passing through cultivated lands, which are being gradually won from the heavy bush, and at a distance of 136 miles from Nelson reaches the township of Reefton. Here, as at Westport, are good hotels, and, as in every one of the larger coast towns, a hospital receiving a Government grant-in-aid. This town was the first in New Zealand to be lighted by electricity. Through the Midland Railway extension of the Grey–Brunner line, Reefton is now connected by rail with Greymouth, from whence it is for the most part supplied. The continuation of the line down the Inangahua Valley is being carried on at present. About two miles inland from Reefton is Black's Point mining township, with several batteries at work in and about the place, a visit to which is generally paid by tourists wishing to see something of the gold-mining industry. Other small mining townships are: Boatman's, Capleston, and Antonio's.

Leaving Reefton by rail, and passing into the Grey Valley through a short tunnel, and by a bridge over the Grey River, Totara Flat is reached, nineteen miles distant. This brings us into the Westland District, to which refer for the balance of the journey to Greymouth.

Roads, Tracks, &c.

Situate on the coast, fifty miles north of Westport, is the Karamea Special Settlement, principally settled from the Nelson and Motueka Valley districts. This part of the district contains some excellent but heavily-timbered land, and is reached from Westport by a road, connecting with the Westport–Mokihinui Railway at the Mokihinui River. There is a bridle-track, also, connecting with Collingwood and Golden Bay. This track passes along the coast northwards, thence up the Heaphy Valley to the Golden Downs, and down the Aorere Valley to Golden Bay. Here again is another coal-basin, which, though of inferior value to the older deposits on the western side, is likely to become of importance, having at the present time one mine in full work. Another coal-basin exists at West Wanganui and Pakawau.

In the Aorere Valley, of which Collingwood is the port, alluvial mining is still found to be payable, and the country contains some valuable timber in the upper part not yet utilised. Nineteen miles south, in Blind Bay, lies the small port of Waitapu, from which a considerable amount of sawn timber is exported, drawn from the Takaka Valley, and brought down by a steam tramway from the upper mills. From the head of this valley the main road is carried over a pass in the Pikikirunga Range, 3,476 ft. high, through the villages of East and West Takaka, Riwaka, Motueka, and Moutere to the town of Richmond, eight miles from Nelson. Inland are also the villages of Ngatimoti, Dovedale, Tadmor, and Sherry, each the centre of a number of small farms, and all connected by fairly-good dray-roads.

An inland road, partly bridle-track and partly dray-road, has been made from Nelson to Canterbury, by way of Tophouse, Wairau Gorge, Tarndale, Clarence Valley, Jollie's Pass, and the Hanmer Plains. Here there are hot mineral springs, much visited by persons suffering from rheumatism and skin-diseases.

Crown Lands.

About 3,000,000 acres of Crown lands still remain unoccupied in the northern part of the Nelson District; they consist principally of high bush-country, with occasional patches of good valley-lands, the greater part being classed as second-class land. The area open for selection to date comprises 9,048 acres of surveyed lands, and 244,937 acres unsurveyed lands, of which the location, nature of soil, &c., have been briefly described in the foregoing pages.

THE WESTLAND LAND DISTRICT.

G. J. ROBERTS, Chief Surveyor.

The Westland District occupies the central portion of the western watershed of the Middle Island, joining Canterbury on the east; its north and south boundaries with Nelson and Otago being the Pororari, Otututu, Grey, and Awarua Rivers. The mean length is 250 miles, and its average width twenty-seven miles. The area is 6,750 square miles, composed, for the most part, of the great central snow-clad mountain chain and its out-running ranges, intersected by narrow bush-clad valleys, and subsiding westward into undulating plateaux, river straths, and shelving coasts.

Physical Features—Mountains.

The great dividing range, which constitutes the eastern boundary from the head of the Grey River to Mount Aspiring, presents a magnificent spectacle of snow and ice-clad summits, representing every aspect of mountain grandeur—masses of rock protruding from ice and snow; precipices of enormous height, with cascades; drifted expanses of snow-fields, feeding glaciers; cañons and ravined foothills covered to the top with forest.

Rivers.

A few of these lead from the foothills, and are of small volume; the others are snow-fed streams descending from the central range, at first in narrow gorges amongst the mountains, but spreading widely on reaching the sea-board country. They are shallow, shingly streams in winter, but swift and deep in summer. In the northern district all the larger rivers are bridged; and; southward, ferries are placed on all the main streams, which, from the melting of the snow, are practically unfordable from September to January. They will all, more or less, be available for electric-power purposes.

Lakes.

The principal lakes are Lakes Christabel, Hochstetter, Ahaura, Haupiri, Brunner, Poerua, Kanieri, Mahinapua, Ianthe, Rotokino, Whahapo, Mapourika, Paringa, Moeraki, and Ellery, with Saltwater and Okarito Lagoons. These and a considerable number of smaller ones are dotted over the district, all varying in character—mountain tarns; coastal tidal lagoons; shallow reedy sheets; deep mountain-girt waters, all more or less forest-locked, and presenting every form of lacustrine beauty. In conjunction with their effluents they form valuable waterways for light transport to adjacent districts.

Forests.

Generally speaking the whole of the district is covered with dense forest, from the sea-beach to the grass-grown tops of the high ranges, even the broken mountain-faces being wrapped with exuberant foliage. The varieties of

trees differ considerably according to soil and altitude. Kamahi and rata are the chief timbers, very useful for firewood, and, being spread over the whole district, constitute an almost inexhaustible supply. Rimu is the chief milling timber, and this also is widely distributed from the sea-board to the interior uplands. Valuable stretches of white-pine belt the low lying depression of the coastal lands, and the same may be remarked concerning the imperishable silver-pine. Clumps of black-pine of good quality are met with, also rarer patches of marketable totara, while serviceable cedars are scattered along the flanks of the inland ranges and all over the lower hills and plateaux. The approximate area of forest equals 2,394,951 acres, of which a fair portion carries timber fit for the sawmill; the remainder is mainly firewood and mining timbers.

Soils.

The high pastoral uplands have a coating of rich mould, and this continues fairly good down to the heavy timber lands. The alpine forest is readily cleared, and imported grasses grow luxuriantly, cocksfoot being the best, as it withstands fire and frosts. The lower flanks of the mountains hold a thinner soil, which at present hardly pays the heavy labour of felling the bush, while the lower heights are somewhat abrupt and unfitted for cultivation. A margin, varying in width, of fertile slopes and fans fringes the basis of the hills, and having a natural drainage constitutes an area of excellent agricultural land.

The upland soils of the coastal undulations and terraces are light loams of moderate fertility, which rest upon transported gravels, the drifted accumulations of eroded hills. On these plateaux are numerous "*pakihi*," or natural clearings, which are mostly extensive tracts of swampy lands, with a peaty soil, resting on thin layers of impervious clay and non-porous gravels, or, in a few cases, on impacted glacial moraines; these formations all overlying loose drifts. The reclamation of these areas is only a matter of time, as the bulk of them are quite drainable.

Stretches of good alluvium border the rivers, streams, and sea-coast, and form the favourite location to settlers.

Climate.

The climate is equable and temperate, remarkably free from storms and fogs, and immediately after bad weather the clouds roll inland, and there is a prevailing clearness of sky. The rain-bearing winds are mostly from the north-west and north-east. The southerly winter gales usually coat the ranges with snow, which, however, rarely falls below 2,000 ft. The rainfall averages 109·89 in. per annum.

Pastoral Lands.

The total area of pastoral lands amounts to 2,002,577 acres, 103,801 of which constitute high mountain grass districts, the balance (1,898,776 acres) being the ordinary bush-clad country, much of which is quite inaccessible to stock. All over the coastal lands, along the slopes of the lower hills, and in the bottoms of the valleys, large herds of cattle are bred and fattened on the dense undergrowth of the forest. The tussock herbage of the high lands is being gradually used by sheep-farmers, and in the near future these natural pastures will support large flocks.

Agricultural Lands

The agricultural lands comprise some 219,400 acres of forest and 11,500 acres of open surface, such as swamps, grass-grown river-beds, and fringes, &c. The bulk of these lands, when cleared of bush, grow root-crops, especially turnips, which are much used for fattening purposes. The even and moist temperature encourages the almost uninterrupted growth of grass and clover, which are very luxuriant, and favour stock-raising. Oats are also grown abundantly for local consumption, and for the most part are cut into chaff. Year by year the imports of potatoes, fruits, butter, and fat stock are decreasing, owing to increased local production.

Means of Communication.

The district is fairly well provided with means of communication. The railway now extends from Hokitika, *viâ* Greymouth, to Reefton, branching at Stillwater to Otira, near Arthur's Pass. An extension to Ross of the Greymouth–Hokitika line is now in course of construction. Coaches twice a week connect with Canterbury, *viâ* Arthur's Pass, and ply daily between Ross, Hokitika, Kumara, Greymouth, and the neighbouring towns; while once a week a mail is conveyed on horseback southward to Gillespie's Beach, and once a fortnight to Jackson's Bay. A subsidised steamer runs between Hokitika and the southern ports as far as Jackson's Bay, plying every two months, thus enabling settlers to obtain supplies and to ship their cattle and produce to market. The Government steamer also calls at Big, Jackson's, and Bruce Bays on her quarterly trips from Dunedin. Steamers also trade regularly between Hokitika and Greymouth and other parts of the colony. The Main South Road, which for many miles skirts the foot of the Main Range, has been so greatly improved of late years that the traveller can now ride comfortably and safely, *viâ* Haast Pass, right through into Otago. Numerous bridle-tracks branch from the trunk line to various points, while the large open river-beds likewise give access to the country on either hand. From Jackson's Bay horse-tracks have been made, *viâ* Cascade River and Barn Bay, to open up the southernmost country. Sundry dips and *cols*, varying in height from 1,800 ft. to over 7,000 ft., leading down the central range, have been explored and mapped, and during the summer months are crossed from time to time by experienced mountaineers. Of these depressions the only sub-alpine saddle is Haast Pass, all the others being liable to blocks by winter snows. A coach-road over Arthur's Pass and a horse-track through Haast Pass have been made. Another bridle-road is also in course of construction across Whitcombe's Pass, but between these points no trans-insular road exists. Tracks have also been constructed giving easy access to the Franz Josef and Fox Glaciers, and in the future, as population increases, doubtless tourist and stock tracks will be constructed along many of the intervening routes. From Okarito northward the district is in telegraphic communication with the rest of the colony.

Towns.

Greymouth.—This, the largest town in Westland, containing a population of 4,200, has progressed most remarkably during the last few years. It is situated on the south bank of the Grey River, close to its mouth, and is the main shipping port for northern Westland. Four railway-lines radiate from Greymouth to the State Coal-mine, Reefton, Otira, and Hokitika. Extensions of the three last-mentioned lines are in course of construction. The town has a Telephone Exchange, good Public Library, first-class drainage, an abundant water-supply, and is well paved and lighted, the water and gas works belonging to the Corporation. One of the Government Railway workshops is located here, and amongst other local industries are a foundry, breweries, sawmills, sash and door factories, furniture manufactories, meat-preserving works, lime and cement works, coachbuilding establishments, &c.

Hokitika.—This town is situated at the north mouth of the Hokitika River, bordering the sea-beach. It contains a population of about 2,000, and is mainly dependent on the adjacent saw and flax mills, farming settlements, and gold-mines. A considerable trade is also done by sea with the miners and settlers in South Westland, for which district it is the shipping port. The town enjoys grand views of Mount Cook and other peaks; and from the terrace on the town hill the panorama of snow-capped mountains is one of the finest in the world. The town possesses a good library, reading-room, and museum; it is lit with gas, and has a telephone exchange. It is well laid out, the main streets being 99 ft. wide and very clean. There is a central park, and as the suburban dwellings are surrounded by gardens the town has a very pleasing aspect. A fine clock-tower, with chimes, has lately been erected in memory of the Westland troopers who fell in the Boer War. The local industries comprise saw and flax mills, sash and door and furniture factories, foundry and engineering shops, coachbuilding, fish cannery, breweries, and coffee and spice works. A very handsome building encloses the High and State Schools.

Brunner.—Picturesquely situated on the banks of the Grey River, seven miles above Greymouth, includes the villages of Dobson, Taylorville, and Wallsend, and contains 1,570 people. This town is wholly dependent on the adjacent Brunner and Tyneside coal-mines and their allied industries of coke-burning, brick and tile making. The output of these mines and manufactories is sent by rail to Greymouth, where the bulk of it is shipped. The mineral traffic causes this short branch to be the best-paying railway-line in the colony. Two fine suspension bridges across the Grey River link the townships together, one being a railway and the other a foot bridge.

Kumara.—This compact little town, with its suburbs of Dillmanstown and Larrikins, of 1,120 inhabitants is placed on the skirts of the largest alluvial goldfield in New Zealand. Main roads to Hokitika, Greymouth, and Christchurch radiate from this place, and a fine turnpike of four miles connects it with the railway. The town is finely situated on a high tableland, and enjoys interesting views of mountains and bush-clad plateaux, river, valley and ocean. Hydraulic gold-mining is carried on here on an extensive scale, the greater portion of the water-supply coming many miles from the inland mountains. Large sludge-channels have been made to carry away the tailings. This industry gives employment to a large number of men, and also provides lucrative work for sawmillers and mechanical engineers. It has finely-equipped and well-built schools and a hospital.

Ross.—Population, 650. A very picturesque township, situated at the foot of the northern slopes of Mount Greenland, 150 ft. above and one mile distant from the sea. It occupies a very sunny sheltered position, and is famed for fruit and flowers. It is essentially a gold-mining centre, and extensive sluicing is carried on. Right under the town area are various layers of auriferous drifts, partly worked, but at present water-logged. In the near future it is expected that these deep levels will be worked again and the town renew its old prosperity. The early completion of the railway from Hokitika will greatly benefit Ross and the surrounding district.

Cobden.—Population, 423. This town is at the northern mouth of the Grey River, and immediately opposite the Borough of Greymouth, to which it is linked by a fine bridge. It is principally occupied by the residences of Greymouth merchants and tradesmen.

Blackball.—Population probably 800. A prosperous and rising township, mainly dependent on the splendid coal-mines in its vicinity. A fine railway and traffic bridge is in course of construction over the Grey River, and a branch about two and a half miles long will connect the town with the main line.

In addition to the towns already enumerated, there are many small mining and sawmilling centres, such as Abaura, Hatter's Terrace, No Town, Stillwater, Kokiri, Nelson Creek, Moana, Nobles, Orwell Creek, Twelve-mile, Stafford, Kanieri, Woodstock, Rimu, Blue Spur, Okarito, Gillespie's, &c. In the near future an important town will be established in connection with the State coal-mines near Greymouth, which are being connected by rail with that town.

Harbours and Ports.

The harbours and ports of Westland are the following:—

Greymouth, twenty-four miles north-east of Hokitika: Extensive harbour-works have been carried out. A breakwater or sea-wall extends some 3,542 ft. seaward from the mouth of the river on the south side, and on the north side 1,125 ft., with internal half-tide training walls, the result being an average depth of water on the bar of 20 ft. 10 in. at high water, and of from 8 ft. to 16 ft. at low water. Vessels of 1,500 tons can now come alongside the wharf. There is berthage accommodation of 2,030 ft., with a minimum depth of 12 ft. to 16 ft. at low water. The principal exports are gold, coal, coke, and timber. The number of vessels that entered the port during the year 1902 was: 591 steamers, tonnage, 201,844; 40 sailing vessels, tonnage, 4,412: being a total tonnage of 206,256 for the year. The train runs down the wharf, and the coal-trucks, specially made for the purpose, are lifted and emptied into the vessel's hold by means of powerful hydraulic and steam cranes, of which there are six, with capacities of from 1½ tons to 12 tons, so that every encouragement is given to

quick despatch. 179,934 tons of coal, 2,108 tons of coke, 1,375 tons of bricks, and 15,604,303 superficial feet of sawn timber, and 142,172 sleepers were exported during the year.

Hokitika: Two training walls have been constructed, the one on the north side being about 2,000 ft. long, while that on the south is 677 ft. The bar is of shifting sand, and the depth at high water varies from 9 ft. to 15 ft., while inside the depth is from 6 ft. to 22 ft. for three-quarters of a mile from the entrance. For ten months out of the twelve the port is usually safe for vessels drawing 8 ft. to 10 ft. of water. The berthage space amounts to 1,000 ft., with from 18 ft. to 22 ft. of water. The principal exports are gold and timber.

Okarito, fifty-five miles south-west of Hokitika: A bar harbour, sometimes completely blocked by a high sandbank thrown up by heavy seas. When open, the entrance is good, with a maximum depth of 10 ft. There is a small jetty about half a mile from the entrance.

Bruce Bay, ninety-five miles south-west of Hokitika: An open roadstead, well sheltered from the south and south-westerly winds by Heretaniwha Point, which juts out fully a mile to the northward. Good anchorage in 18 ft. of water opposite the Green rock, which stands up out of the water. Good boat-landing with above-mentioned winds on a smooth sandy beach.

Paringa River, one hundred and four miles south-west of Hokitika: Open roadstead. Vessels coming in and out should give Harata Reef (off the north head) a wide berth. There is also a sunken reef, awash at low water, in the middle of the Bay, and a dangerous sunken rock just off the south head, two or three chains away, facing a small sandy bay and right abreast of the trig. station. Vessels lie inside and a little to the northward of this rock, about a quarter of a mile from shore, and are quite safe with southerly winds.

Haast River, one hundred and eighteen miles south-west of Hokitika: A constantly shifting bar at entrance, which is nearly opposite and a little to the southward of the Alhambra Rock. This rock stands well out of the water, and vessels entering can go on either side with safety. Average depth of water on bar from 6 ft. to 8 ft.

Okuru and Turnbull Rivers, one hundred and thirty-eight miles south-west of Hokitika: These rivers join just inside the entrance. Good straight channel: average depth, 8 ft. to 10 ft. The port is well sheltered by Open Bay Islands, which lie about three miles away, just opposite the entrance, bearing a trifle west of north. A dangerous reef lies about two miles and a half from the south-west point of the smaller island, and immediately to the north-west of a line drawn from the last-named point to the extreme end of Jackson's Head.

Jackson's Bay, one hundred and fifty-three miles south-west of Hokitika: Good shelter and anchorage open only to north-east, with 12 ft. of water within a few chains of shore. Jackson's Head runs out about one mile and a half in a north-easterly direction from the southern end of the Bay. This is the only ocean harbour on the coast of Westland, and could be converted into a first-class port at comparatively small cost. No doubt Jackson's Bay will eventually form a coal port, as indications of coal are found from the bay to Tauperikaka, a distance of thirty miles. Moreover, the recent discovery of a practicable pass through the Main Range, *via* the Waiatoto and Axius Rivers, will make it in the near future the natural outlet for the Lake Wanaka country.

Big, or Awarua Bay, two hundred miles south-west of Hokitika: At the extreme south-west corner of Westland. An open roadstead, sheltered from east and south-west winds: 24 ft. of water on south side anchorage and 30 ft. on north side, just opposite Crayfish Rock, in a spot sheltered from northerly winds.

Steamers have also in past years entered the Taramakau, Waitaha, Wataroa, Wanganui, Waiatoto, and Arawata Rivers, all of which have bar-entrances. The Cascade River is likewise navigable, though no steamer has as yet been in; and goods and passengers are also landed at the roadsteads of Saltwater, Gillespie's Beach, and Abbey Rocks.

Gold-mining.

The District of Westland contains the greatest area of alluvial auriferous ground on the West Coast.

All the Westland rivers carry down more or less gold, but the three great gold-yielding rivers are the Grey, Arahura, and Waiho, the bars and beaches of which appear to be replenished with fresh deposits of the metal after each flood. We may safely assert that every large or small stream in the Grey Valley is auriferous, and the gold-bearing nature of the adjoining gravels is evidenced by the old and new workings which are scattered all over the watershed. Again, if one stands on the summit of Mount Turiwhaté, the ancient beds of the Arahura can be easily traced northward to the Kumara and southward to the Rimu diggings. Similarly, the Waiho has in olden times flowed both northward down the present valley of the Okarito River and southward to the Omoeroa River, the lateral terraces in both directions being well defined and gold-bearing.

There are three main gold-bearing deposits in Westland. The first, which may be called riverine leads, run generally westward. These are ancient river-beds, often lying at a considerable elevation, of which the bulk has been washed away, leaving detached portions, as Kumara and Rimu. The second are beach-leads, both those along the present coast-line and others running parallel thereto at distances varying from one quarter to four miles inland, and at levels from a few feet below to a couple of hundred feet above sea-level. The third are extensive masses of gravel, &c., occurring in large isolated patches, as at Bell Hill, Big Dam Hill, Humphrey's Gully, and Bald Hill, north of the Haast. These drifts have all one noticeable peculiarity—namely, that they invariably coat the seaward faces of the hills, and neither gold nor drift is to be found on the inland slopes. Gold-bearing fans from Mount Greenland have been found at different levels on Ross Flat, having probably been deposited in deep water by successive land slides.

Hydraulic mining on a large scale is successfully carried on in various portions of the northern districts, and is rapidly being extended to many other localities. Kanieri Lake is being again utilised, and an abundant quantity of water is now available for the sluicers in the Kanieri Valley. The extension now proposed of that race to Back Creek would develop a very large field. The tapping of the Arahura River will enable the miners at Blue Spur to obtain an unfailing supply of water and command a large area of auriferous country at present unworkable from want of water at a sufficient altitude. A large acreage of alluvial drift has been pegged out as dredging claims. Some companies are at work, with more or less profit; many more are busy erecting plants, while others are completing the preliminary surveys, inspections, and borings essential before placing their properties on the market. Experts are assured that a large extent of auriferous gravels exist all over the low-lying country which will yield remunerative returns by this new treatment. Undoubtedly great areas of swampy, undrainable, and hitherto unavailable lands will be thoroughly prospected, and it is confidently predicted that valuable finds will be made in such districts. Numerous and costly experiments have been made with dredges of different types in the endeavour to work economically the gold-bearing sands which lie along the sea-beaches for a distance of a hundred and forty miles; but very few have proved a success. A considerable number of miners ("black-sanders") work on some of the beaches, and seem to make a fair living, many of them having been so employed in one neighbourhood for over twenty years.

Gold-bearing quartz has been found throughout the district, the most promising finds being at Paparoa, Mount Alexander, Taipo Range, Browning's Pass, and Cedar Creek. Silver ores, associated with gold, have also been found, notably at Rangitoto.

Coal-mining.

As noted before, great quantities of coal are obtained from the mines at Brunner, and also from the fine seams at Blackball, higher up the Grey Valley. It would appear that the greater portion of the seaward country hereabouts contains practically inexhaustible coal-fields. Extensive seams are now being developed at the "State Coal-mine," in the Seven-mile Creek Basin, and further along the coast, and on the higher slopes of the Paparoa Range large outcrops are being prospected. This region contains the greater area of coal-bearing strata, but all the way down the coast to Jackson's Bay, wherever the coal-measures

have been protected from the scour of the ice-streams of the great glacial period, isolated patches of coal exist; possibly borings would prove the lower coal-beds to be intact under the overlying drifts.

Minerals.—General.

Specimens of nearly all the known minerals have been discovered in various parts of Westland District. The Paparoa Range contains many varieties, and eventually will hold a large mining population. Slate has recently been found here. Copper lodes have also been discovered throughout the district, the finest outcrops being on the western slope of the Matakitaki Range, with good seams and beds of coal and limestone adjacent. Petroleum has been found in the Arnold Valley, and borings are now being made to test and develop what is hoped may be a good oil-bearing basin.

Sawmilling.

This industry is steadily progressing; there are thirty-four mills in operation, and about 16,000,000 ft. of timber and 143,000 silver-pine sleepers were exported last year. There are over five hundred hands engaged in the lumber trade, either at the sawmills or as sleeper and firewood cutters, &c. The completion of the railway to Ross will give a considerable impetus to this business.

Flax-milling.

It may be stated that every available strip of flax in this district has been lately taken up. There are three mills in full swing, employing over ninety hands, and as other sixteen leases have been granted by the Land Board, on condition that mills are erected within a reasonable period, a large expansion of the industry may be expected.

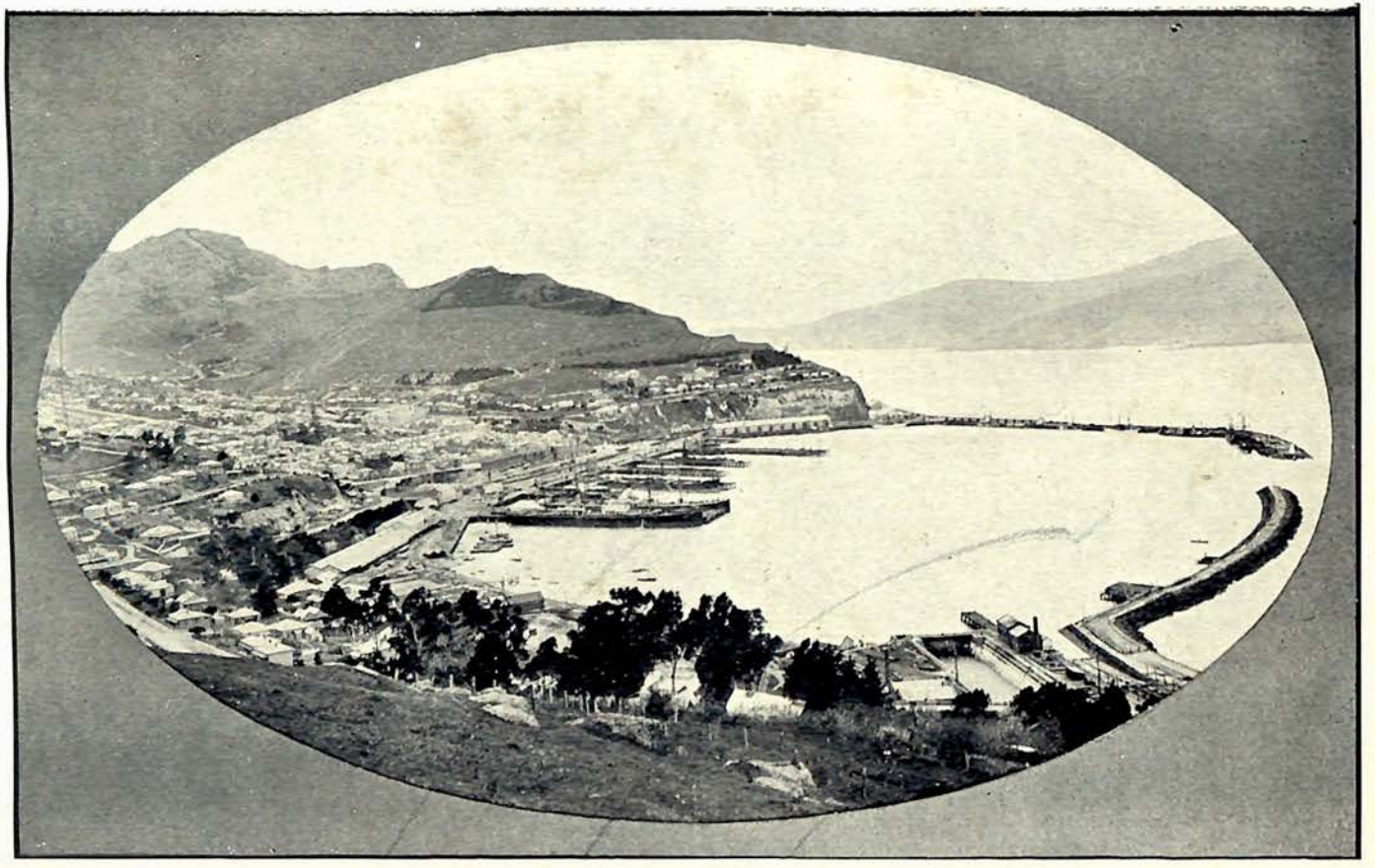
THE CANTERBURY LAND DISTRICT.

THOMAS HUMPHRIES, Chief Surveyor.

Boundaries—Physical Features.

The Land District of Canterbury comprises the central portion of the Middle Island, and lies between the Conway River, Barefell Pass, and Mt. Franklin on the northward; the Spenser Mountains, Travers Peak, Mt. Barron, the Amuri, Hope, and Hurunui Passes, the summit of the Southern Alps, and the western watershed of the River Hopkins and Lake Ohau on the westward; the Rivers Ohau and Waitaki on the southward; and the South Pacific Ocean on the eastward. It lies between south latitudes 42° 5′ and 44° 55′, and east longitudes 169° 45′ and 173° 30′. The length of the district north-east and south-west is about 220 miles; the breadth W.N.W. and E.S.E., from the summit of the Alps to the sea, averages seventy miles. The sea-board has a length of about 300 miles, consisting generally of low-lying beaches, broken by the projection eastward of Banks Peninsula, which contains the only large natural harbours. That portion of the district which fronts the ocean between the Ashley and Opihi Rivers is flat land, about 2,500,000 acres in extent; north and south of those limits the plain is interspersed with undulating and hilly country. This great plain stretches westwards, rising and merging into downs and hills, which again extend westward and merge into the Southern Alps and the offshoots therefrom. Banks Peninsula, which has an area of about 250,000 acres, is wholly composed of ridges and hills, deeply intersected by basins and gullies, the result of volcanic action.

The Southern Alps, which form the backbone of the island, are a continuous chain of mountains, with a succession of magnificent peaks, attaining their culminating point in Mount Cook, or Aorangi, 12,349 ft. above sea-level; there are, besides, numerous peaks ranging in altitude between 7,000 ft. and 10,000 ft. Offshoots, extending to great distances eastward and south-eastward from the main range, attain elevations of 6,000 ft. to 9,000 ft. On these mountain-ranges are numerous and extensive glaciers, from which emanates the river-system of the district, comprising the Waiau-ua, about 100 miles in length; Hurunui, 85 miles; Waimakariri, 90 miles; Rakaia, 85 miles; Ashburton, 64 miles; Rangitata, 74 miles; the



Y.B. Lyttelton Harbour.

Waitaki and its main feeders, 140 miles. These rivers rush down from the mountain-gorges, through the intervening ranges and hills, and traverse the plains to the sea. The channels on the plains are shallow, and extend in some instances over a mile in width.

These rivers serve as outlets for a portion of the Lake system of the Middle Island, Lake Sumner being connected with the Hurunui, Lakes Coleridge and Heron with the Rakaia, and the Mackenzie Country lakes—Tekapo, Pukaki, and Ohau—with the Waitaki. Another important lake is that known as Lake Ellesmere, west of Banks Peninsula; it is separated from the ocean by a narrow shingle-spit only 5 chains across at one point, through which, at certain seasons, the flood waters force a channel to the sea. Lake Tennyson is situated on the eastern flank of the Spenser Mountains, 3,614 ft. above sea-level.

Climate.

The climate of Canterbury is well suited to Europeans. It resembles that of Great Britain, but on the plains is far more equable, the mean daily range of temperature being 17·10° Fahr. Observations taken at Lincoln (fourteen miles from Christchurch) for a period of ten years, ending December, 1892, give the following results: Barometer, reduced to 32° Fahr. and sea-level, 30·06 in.; mean maximum daily temperature, 61·47°; mean minimum daily temperature, 43·27°; mean average temperature, 52·37°. The extremes of temperature were 92° and 22° Fahr. The rainfall for the same period averaged 26·809 in. per annum, the extremes being 35·287 in. in 1886 and 14·836 in. in 1890. The average annual number of days on which rain fell was 123, the extremes being 149 in 1887 and 98 in 1891. Snowfalls are very light on the plains, but in the high uplands the climate is much colder and more severe. The changes of weather and temperature are sudden, calms and gales, rain and sunshine, heat and cold alternating. The prevailing winds are north-east, south-west, and north-west—the last a hot wind. The climate, as a whole, splendidly healthy, bracing, and most enjoyable.

Foundation and Settlement.

The district was occupied, in the first instance, by settlers sent out by the Canterbury Association, which was formed in 1848, and incorporated by Royal Charter in 1849, under the auspices of prominent men in England, including the Archbishop of Canterbury and Lord Lyttelton. The step was not taken until after due inquiry as to the most suitable part in which to establish a settlement. Captain (afterwards Sir George) Grey, at that time Governor, recommended the Wairarapa, but it was finally decided to take over from the New Zealand Company a tract of the Canterbury Plains, in the neighbourhood of Port Cooper. Captain Thomas, the agent of the association, who had advised the selection, superintended the surveys and the preparations for receiving intending settlers. The original intention of the founders was that the settlement should be independent and complete in itself, and should embrace only such persons as were members of the Church of England and were approved of by the association. This was frustrated by the influx of numbers of persons of all classes and beliefs. The first body of emigrants arrived at Port Cooper on the 16th December, 1850, and the settlement remained under the control of the association, as directed by a committee of management in England, and under the active personal supervision of Mr. John Robert Godley, until 1853, when the whole of Canterbury became a province of New Zealand by the provisions of "The Constitution Act, 1852."

Thenceforward the control of the settlement was vested in the Superintendent and the Provincial Council. The first Superintendent was Mr. James Edward FitzGerald, who held office till 1857; he was followed in succession by Mr. William Sefton Moorhouse, 1857-1863; Mr. Samuel Bealey, 1863-1866; Mr. Moorhouse again till 1868; and Mr. William Rolleston till the abolition of the provinces in 1876, when the district came directly under the control of the General Government.

Internal Communication.

In no part of New Zealand are the means of communication better than in Canterbury. The natural facilities of the country have been abundantly supple-

mented by railways and roads. Lyttelton, the chief port, is connected by rail with Christchurch, the heart and centre of the whole district. From Christchurch the main line extends northwards to Culverden, a distance of 69 miles, with a branch from Waipara to Scargill (about fifteen miles) open for traffic. It is proposed to extend this branch to Mackenzie, in the Cheviot District. Southward the main trunk line runs through Waitaki, 139 miles to Dunedin. These lines tap and serve the whole coastal district, and the lands adjoining on the western side. As feeders to these trunk lines, eight branch lines have been constructed westward, and two lines south-eastward; the former, in most instances, extending to the foot of the hills.

Combined with the railway system is a complete network of main, district, and subsidiary roads, extending into all parts of Canterbury. The total length of railways is 460 miles, and the roads probably exceed 10,000 miles in the aggregate. The completion of this splendid system is due, partly to the foresight of the original settlers, partly to the exertions of the Provincial Government, and partly to the railway and public-works policy of the late Sir Julius Vogel.

Geological Formation.

According to Sir James Hector, the main western ranges are composed of Upper Palæozoic rocks, having at their base extensive plains of Tertiary fluviatile formation, with occasional protruding ridges of Upper Mesozoic, forming low mountain-ranges subordinate to the main axis. Banks Peninsula consists of basic volcanic rocks.

Area, Nature, and Disposition of Lands.

The area of the Canterbury Land District is 9,604,045 acres, of which the estimated area of forest-land is 516,030 acres. Forest-lands are found in Banks Peninsula and in the Mount Peel and Waimate districts, where the timber consists chiefly of rimu, totara, and matai; at the sources of the Waiau-ua, Ashley, Waimakariri, Rakaia, and Hopkins Rivers, at Lakes Ohau and Sumner, and near Springfield and Methven, the timber in these localities being mostly native beech; and near Oxford, where the beech is interspersed with rimu, totara, matai, &c.

The lands of Canterbury may be classed approximately as follows: First class, 2,046,071 acres; second class, 5,207,173 acres; third class (barren lands and lands of small value), 2,350,801 acres: total, 9,604,045 acres.

The disposition of lands was in 1903 as follows:—	No. of Holders.	Area in Acres.
1. Crown lands disposed of for cash (including land granted under Midland Railway Act, 572,000 acres, but deducting lands repurchased for settlement—174,463 acres) ...	...	3,995,335
2. Lands held on deferred payments	21	11,339
3. Lands held on perpetual lease	78	4,279
4. Lands held as leaseholds in perpetuity	1,273	229,738
5. Lands held in occupation with right of purchase ...	21	1,454
6. Lands held as village-homestead special settlements ...	407	12,440
7. Lands held as small grazing-runs	82	172,437
8. Lands held as grazing-farms (on Cheviot Estate) ...	48	45,978
9. Pastoral licenses	148	3,521,091
10. Special-settlement associations	41	4,653
11. Reserves and Crown lands held under temporary occupation licenses (area, 94,565 acres, included in 12 and 16)	639	...
12. Area of land reserved and granted under various Acts (exclusive of Midland Railway land, included in 1) ...	...	970,734
13. Land purchased and disposed of under Land for Settlements Acts (included in 4, 7, 10, and 11; 917 holders, 173,167 acres)	...	...
14. Crown lands open for selection	...	3,958
15. Crown lands being prepared for selection	...	8,174
16. Barren lands, and lands for future disposal	...	622,435
Total	2,758	9,604,045

In explanation, it may be noted that No. 1 comprises the freehold lands conveyed, and that tenants of Nos. 2, 3, and 5 have the right of acquiring the freehold, which is not the case with tenants of Nos. 4, 6, 7, 8, 9, 10, 12, and 13. Crown lands proper are: 14, open for selection; 15, being prepared for selection.

Soils.

The Southern Alps and mountains adjoining are, owing to their great altitude, subject to disintegration, and form for the most part rocky barren wastes.

The lower ranges and hills, the high tablelands, and the light stony portions of the plain form the pastoral areas.

In the northern and southern districts and in the great central plain are the agricultural areas. This latter class of land comprises rich alluvial tracts about Cheviot, Rangiora, Kaiapoi, Lincoln, Ellesmere, Longbeach, Temuka, and Waimate, and the splendid plain- and down-lands which extend from Cheviot to the Waitaki.

Banks Peninsula, where the soil is of a rich volcanic nature, though exceedingly hilly, has alluvial areas in the valleys and about the bays.

Pasturage and Crops.

Below a certain level, the mountainous and hilly regions, and the high upland country in the western and northern part, are covered by native grasses, with an admixture of English forage-plants where the character of the soil and other circumstances are favourable.

The pasturage, which is very suitable for sheep-farming, is taken full advantage of by the pastoral tenants of the Crown, and is used to some extent by freeholders. The light stony portions of the plain also contain native grass lands, well adapted to merino sheep.

The lower hills, downs, and better kinds of plain-country have been widely cultivated, and have proved well fitted for the production both of cereals and of grasses.

The chief crops grown in Canterbury District are wheat, oats, barley, turnips, rape, clover- and grass-seed; while amongst other crops produced are rye, peas, beans, mangolds, beet, carrots, and potatoes.

Of the cereals, wheat is the most largely grown, and was for many years a large item of export. In the season 1902–1903 the area under crop for threshing was 136,316 acres, being over two-thirds of the total wheat area of the colony. The total yield was 5,349,130 bushels, being an average of 39·24 bushels per acre.

Oats also are very successfully grown, the figures for the same period being 200,581 acres, or about five-twelfths of the total area of this crop in the colony. The total yield was 9,481,587 bushels, being an average of 49·06 bushels per acre.

Barley of superior quality is also produced, the figures being 9,650 acres, equal to over one-third of the total area of barley crop in the colony. The total yield was 480,234 bushels, being an average of 49·76 bushels per acre.

Grass-seeds are abundantly grown, cocksfoot mainly on the splendid Banks Peninsula country, and ryegrass throughout the land district.

Potatoes, which yield crops of excellent quality, were grown in 1902–1903 on 9,408 acres; turnips and rape were grown on 196,917 acres, and the combined area of other crops grown, including rye, peas, beans, mangolds, beet, carrots, and onions, was 14,214 acres. The area of wheat, oats, and barley for fodder was 57,344 acres. The area ploughed and laid down in English grasses was 1,520,186 acres. Surface-sown lands comprised 515,284 acres. The total area under crop was 624,430 acres, and the area broken up but not in crop, 9,744 acres. Plantations, exclusive of private gardens, occupied an area of 26,654 acres. The aggregate area of private and market gardens, orchards, and vineyards over quarter of an acre in extent was 8,388 acres.

Stock.

The pastoral and agricultural lands provide grazing and fodder for a large number of sheep, cattle, horses, and other stock. Of late years the value of the

plains has been much enhanced and the carrying-capacity thereof greatly increased by the water-race system, which supplies water throughout the length and breadth of the dry areas, and enables the country to be occupied in smaller holdings than would otherwise be possible.

The following table shows the extent, cost, and other particulars regarding the water-race system in the several counties in 1903:—

County.	Area watered.	Miles of Races.	Total Cost.	Cost per Acre watered.	Amount of Water distributed every Twenty-four Hours.	Annual Charge for Use of Water.
	Acres.		£	s. d.	Gal.	
Amuri ...	24,162	54	4,800	3 $11\frac{2}{3}$	...	Races are maintained by an annual charge in proportion to area watered.
Ashley ...	122,000	500	25,000	4 1	27,000,000	From $\frac{3}{4}$d. to 6d. per acre, in addition to special rates for interest on loans.
Selwyn ...	326,888	1,119	73,819	4 5	90,940,960	8s. 4d. to £1 5s. per 100 acres.
Ashburton	586,000	1,350	43,300	1 $5\frac{3}{4}$	86,000,000	From £2 to £3 per mile of race.
Geraldine	71,212	260	9,010	2 $6\frac{1}{2}$	29,520,000	About 7d. per acre, including a rate for payment of principal and interest on loans, and a rate for maintenance.
Levels ...	19,000	71	5,500	5 $9\frac{1}{2}$	6,480,000	$1\frac{1}{2}$d. per acre, and on part of area an interest-rate of $\frac{1}{4}$d. in the pound on capital-value.
Mackenzie	9,000	32	1,885	4 $2\frac{1}{4}$	7,516,800	$2\frac{11}{16}$d. per acre on part of district and $\frac{1}{8}$d. in the pound on capital value in remainder of district.
Waimate	35,700	157	8,125	4 7	8,500,000	Races are maintained by an annual charge on the value of lands watered.

The sheep in the District of Canterbury, in April, 1902, numbered 4,933,681. In October, 1902, there were 52,637 horses, 109,274 cattle, and 41,831 pigs.

The district has a well-deserved reputation for the classes and splendid quality of its sheep. On the mountains and higher lands the merino still predominates; but on the richer low-lying ranges, hills, and plains the prevailing types are crosses between the merino and Leicester, Lincoln, Romney Marsh, and other breeds. In proof of the superior character of the flocks, pasturage, and climatic conditions in the Middle Island, the following percentages of lambing returns are quoted—these are "fair average returns, but much higher might have been exhibited": Mountain native pasture—pure merino, 75·36; pure merino and Border Leicester, 88·94: English-grass pasture—crossbred and Border Leicester, 80·8; half-bred Border Leicester, 82·79; Border Leicester, 90·77; Lincoln, 88·08; Romney Marsh, 111·46; English Leicester, 93·34; Shropshire, 97·41; Southdowns, 96·87. It must be borne in mind that the flocks and herds are supported by the natural and artificial pastures without housing.

Owing to the development of the frozen-meat trade a great impetus has been given to sheep-breeding. The bulk of the primest meat exported from the colony is supplied by this district, with Marlborough, and commands the highest price

in the London markets. In the year ended 31st December, 1902, the number of carcases frozen was 2,004,682, valued at £1,316,433. There were also produced 15,867 cases of preserved meats, 15,480 casks of tallow, 6,555 tons of bonedust and manures, besides neatsfoot-oil, oleo, &c.

The total quantity of frozen meat exported from Canterbury during the year ended 31st March, 1903, was 866,190 cwt., valued at £1,213,967. At Belfast, Fairfield (near Ashburton), Islington, and Timaru, freezing-works are established, each containing a complete plant for carrying on the industry, as well as departments for curing, preserving, boiling-down, tallow rendering, fellmongering, and the manufacture of manures. The Belfast Freezing Works, owned by the Canterbury Frozen Meat and Dairy Produce Export Company, contain engines of 710-horse-power, and employ 300 men. They have storage for 90,000 carcases, and can put through 5,500 carcases in a day. The same company has a factory at Fairfield (near Ashburton), where 65,000 carcases can be stored and 4,000 dealt with in a day, and another factory is being built in South Canterbury. The Islington and Timaru works, which are owned by the Christchurch Meat Company, employ in all about 750 men, and have engines representing 403-horse-power. The former can put through 8,000 carcases per diem, and have storage for 140,000 carcases. The latter can deal with 6,000 carcases in a day, and have storage for 100,000 carcases. At Hornby there has been established by Messrs. Nelson Brothers (Limited) a well-equipped factory for freezing only, with engines of 300-horse-power, and a capacity of dealing with 1,000 sheep per diem. The factory has storage-room for 50,000 sheep, but is not now in operation.

Wool.

During the year ended 31st March, 1903, there were shipped at Lyttelton and Timaru 42,068,584 lb. wool, valued at £1,222,021; and to this must be added the amount (about 1,000,000 lb.), bought for manufacture by the woollen-mills in the district. The Kaiapoi Woollen Manufacturing Company, Limited, owns large woollen mills at Kaiapoi, and clothing factories at Christchurch. These are fitted with modern machinery and appliances, and the company's products have obtained a considerable reputation. The company employs about 1,020 hands, pays about £58,000 in wages per annum, and uses about 3,200 bales of wool and £6,000 worth of other colonial products in a year. The staple of the New Zealand wool, especially the long-wool and cross-bred, is remarkable for its freedom from breaks and other imperfections. The average clips are approximately as follows: Merino, 4 lb. to 7 lb.; quarter-breds, 6½ lb.; half-breds, 7½ lb.; three-quarters, 8½ lb.; Leicesters, 10½ lb.; Lincoln, 11 lb. From special flocks clips up to 25 lb. and 30 lb. are obtained.

Butter and Cheese.

Banks Peninsula and the rich tracts of country previously mentioned are excellently suited for dairy farming. The pasturage and climatic conditions are favourable, and a great increase in the production of butter and cheese may be looked for, more especially as housing and hand-feeding are in some districts unnecessary. A central co-operative dairy factory has been established at Addington, served by twelve creameries, situate at Marshlands, Oxford, Halswell, Springston, Doyleston, Little River, Ladbrooks, Lakeside, Kaiapoi, Green Park, Brookside, and Ashburton, each capable of dealing with the milk of 1,000 cows. There are also very complete dairy factories at Taitapu, Sefton, Cheviot, Timaru, Temuka, Southbrook, Belfast, Tinwald and Le Bon's Bay, as well as cheese-factories at Flemington and German Bay. The number of cheese and butter factories in the district in 1900 was 17, and of creameries 14; the number of hands employed was 75; the output of butter and cheese amounted to 2,906,715 lb.; and the total value of the output was £108,332.

Timber.

The sawmilling industry finds its development chiefly in the Oxford, Little River, Mount Somers, and Waimate districts. The number of mills in Canterbury in 1901 was eighteen, employing 260 hands, the horse-power being 317. The output in

1900 was 4,714,959 ft., valued at £22,277. The number is, however, diminishing, owing to the working-out of the available timber. The timber comprises birch, totara, red- and white-pine. The first-named is used chiefly for sleepers and fencing, the totara and pine for building purposes. Including the work done by the planing- and moulding-mills the value of all the manufactures under this head was £45,866.

Fruit.

The district is eminently adapted for the growth of a large variety of fruits, especially all that flourish in Great Britain. Attention has recently been directed to landing supplies of fruit in London; the attempts so far have proved satisfactory, and point to the possibility of a large trade being established.

Coal.

Brown coal is found at the Malvern Hills, Homebush, Whitecliffs, Springfield, Mount Somers, Albury, and various other places. Lignite is also commonly distributed. For the year 1902, the output from 15 collieries, employing about 60 hands, was 19,445 tons, bringing the total amount raised from 26 collieries up to the 31st December, 1902, to 429,586 tons. The seams worked vary from 16 ft. to 2 ft. 3 in., the average width being 8 ft. At Acheron, near Lake Coleridge, a true anthracite is found, the other pits in the district being of brown coal or lignite.

Building-stones.

The building-stones of Canterbury comprise some excellent varieties. The Halswell quarries produce an exceedingly hard and close-grained stone of a dull leaden-grey colour. Granular trachytes are obtained from Governor's Bay, Lyttelton; porphyrites at Malvern Hills; good limestone at Malvern Hills, Waikari, Mount Somers, and various other places; bluestone rock is found at Timaru suitable for millstones. There is abundance of limestone in North Canterbury, Mount Somers, Castle Hill, and various other parts, which is well adapted for making lime.

Fisheries.

Deep-sea fishing is carried on from Lyttelton and Akaroa, the kinds of fish chiefly caught being groper (hapuku), ling, conger eels, moki, butterfish, barracouta, soles, whiting, red-cod, herrings, and garfish. From Lake Ellesmere and the river estuaries excellent flounders are obtained.

Trout thrive amazingly in the rivers and fresh-water lakes, affording excellent sport.

Manufactories.

Excluding mines and quarries, the total number of manufactories in Canterbury at the date of the census in 1901 was 648, employing 7,050 males and 2,754 females.

Included in the above were 35 printing, 10 agricultural-implement, 26 coach building and painting, 29 fellmongering, tanning, currying, and wool-scouring establishments, 5 sail- and oilskin-factories, 27 boot-and-shoe factories, 7 rope-and-twine works, 8 flax-mills, 4 boiling-down, meat-preserving, and freezing works, 10 bacon-curing works, 17 cheese- and butter-factories, 23 grain-mills, 34 chaff-cutting and grass-seed-dressing works, 16 breweries, 10 malt-houses, 27 aerated waters and cordial works, 4 sauce- and pickle-making factories, 6 soap- and candle-works, 18 sawmills and sash-and-door factories, 4 gasworks, 20 brick, tile, and pottery manufactories, 14 iron- and brass-foundries, 25 cycle-works, 20 furniture-factories, and 8 engineering-works.

The census returns also showed that in 1900, the value of land, machinery, and buildings used for factory purposes was £1,489,096, and the total value of manufactures £4,701,304.

Educational Institutions.

Primary Schools.—The district is divided into two parts, termed North and South Canterbury, each presided over by an Educational Board. Under the control of the Boards schools have been established throughout the whole country wherever population warrants their erection.

The number of children attending the public primary schools in Canterbury, on 31st March, 1903, was 24,786. Average daily attendance, 20,612. Number of teachers—males, 250; females, 403: total, 653. Number of schools, 277.

There is a Normal School at Christchurch for the training of teachers.

Secondary Education.—For the further education of children ample provision has been made by the establishment of secondary schools. The principal schools of this class are the Boys' and Girls' High Schools at Christchurch, Rangiora, Ashburton, and Timaru. For more advanced students Canterbury College, Christchurch, is available. This institution was founded and endowed by the Provincial Government in 1873. It is presided over by a Board of Governors. The teaching staff comprises twelve professors and lecturers, and the number of students attending lectures is 224. The School of Engineering, Electricity, and Technical Science, recently established as a special branch of the college, is well equipped, and is attended by a large number of students. The School of Art is also a special branch of the college work, and the popularity of both these branches has been met by the recent erection of considerable additions to the building accommodation.

It should be recorded here that the Provincial Government of Canterbury was fully alive to its duties as regards higher education. It made reserves for the purpose of endowment for the following objects: (1) College, 101,640 acres, reserved June, 1873; (2) technical science, 103,000 acres, reserved July, 1873; (3) School of Agriculture, 100,950 acres, reserved June, 1873; (4) Boys' High School, 9,220 acres, reserved at various dates; (5) Classical School, 8,953 acres, reserved at various dates. To these were subsequently added the following: (6) Girls' High School, 2,578 acres, reserved January, 1878; (7) Medical School, 5,000 acres, reserved December, 1877.

Private Schools.—There are numerous private schools, independent of the State, the chief amongst them being Christ's College, Christchurch, connected with the Church of England. The Roman Catholics support schools of their own in Christchurch, Pleasant Point, Lyttelton, Timaru, Addington, Papanui, Ashburton, Akaroa, Rangiora, Sheffield, Temuka, Leeston, and Waimate. There are besides, in Christchurch, some excellent private boarding- and day-schools for both boys and girls.

Other Institutions.

Canterbury has the advantage of possessing many flourishing public institutions. The School of Art, Christchurch, was established by the College Governors in 1882; the Art Gallery owes its origin to the Art Society, the site being the gift of the Government. The Canterbury Agricultural College, Lincoln, also founded by the College Governors, is surrounded by 660 acres of land. The commodious buildings, which cost over £20,000, provide accommodation for the Director and teaching-staff, and for forty-five students. The fees are on a low scale. The farm buildings are complete, and include a well-equipped dairy. Instruction is given in agriculture, chemistry, botany, mechanics, physics, surveying, &c.

The Public Library, Christchurch, under the control of the College Governors, contains reading-rooms, a circulating library of 21,728 books, and a reference library of 14,371 volumes. One hundred and seventy-two magazines and newspapers are provided. The number of subscribers is 1,950, and the average daily attendance between 900 and 1,000. A spacious free reading-room, 60 ft. by 36 ft., has recently been erected, and is supplied with 127 English, American, and colonial newspapers and periodicals.

The Museum, Christchurch, is a handsome pile of stone buildings; the collections are large and varied. They are separated into two groups: (1) Those from New Zealand; (2) those from foreign countries. In the New Zealand department the skeletons of whales and moas, as well as the collections of shells (tertiary and fossils) and rocks, are specially good; and the Maori collection, exhibited in a Maori house, is also of considerable interest. In the foreign department, the geological, mineralogical, and ethnological collections are the most extensive, but there is also a good illustrative series of Egyptian and Roman antiquities, as well as of the remains of prehistoric man in Europe and America.

This institution owes its origin and success to the foresight, skill, and energy of the late Sir Julius von Haast, and to the munificence of the Provincial Government.

The philanthropic institutions embrace the Christchurch, Akaroa, Ashburton, Timaru, and Waimate Hospitals; the Sunnyside Asylum for the Insane; the Rhodes Convalescent Home; the Memorial Home for the Aged at Woolston; the City Mission and Destitute Men's Home, Christchurch; the Deaf-and-Dumb Asylum at Sumner; the Orphanage, Lyttelton; the Industrial School at Burnham; and the Mount Magdala Asylum, Samaritan Home, and St. Mary's Home, in the vicinity of Christchurch.

Towns.

Christchurch, the capital city of the Canterbury District, is situated on the plains. It is practically level, the original portion of the city being laid out in rectangular form, two miles by one mile and a quarter, and intersected diagonally by a street. All the principal streets are 66 ft. in width. There are numerous open spaces, including the Cathedral Square in the centre, and Cranmer and Latimer Squares. The Avon, a pretty stream, overhung by willows, runs through the town, presenting from all points charming vistas. The city is surprisingly English in its appearance, architecture, and surroundings. The central portion, where stands the Cathedral, Government offices, and other substantial structures, has a handsome, well-built look. Other parts contain fine public buildings, such as the Museum, Canterbury College, High Schools, &c. The whole is admirably set off by Hagley Park, 400 acres in extent, the Domain and Botanical Gardens, 79 acres, Lancaster Park, the Town Belts, and other public and private gardens and plantations. The suburbs can show many handsome houses and beautifully kept grounds.

On the 1st April, 1903, the suburbs of Sydenham, Linwood, and St. Albans were amalgamated with the original city proper into what is known as "Greater Christchurch," comprising a total population (according to the census of March, 1901) of 42,286, in 8,515 houses. Including the adjacent Borough of Woolston, and the suburbs of Papanui, Fendalton, Riccarton, &c., the total population amounts to about 57,000. Tramways connect the centre of the city with the outlying areas of Addington, Sydenham, the Port Hills, and Papanui, and with the seaside villages of New Brighton and Sumner. The city has been drained at considerable expense, the sewage being conveyed three miles and discharged on the sand wastes near the sea. A pure and copious water-supply has been provided by nature, and is obtained by artesian wells. For the purposes of municipal government the city is divided into four wards, and its affairs are controlled by the City Council, presided over by the Mayor. Christchurch is the centre of trade and commerce for the North Canterbury agricultural and pastoral country, and the headquarters of many manufacturing industries, including carriage, boot, and clothing-factories, flour-mills, breweries, meat preserving and freezing, biscuit, planing and moulding, bicycle, and other works.

There are large and well-equipped show-grounds at Addington.

The Canterbury Agricultural and Pastoral Association and the Industrial Association, operating through a public company, have recently erected a fine block of buildings in brick and stone, comprising a large hall capable of seating three thousand persons (and known as the Canterbury Hall), together with smaller halls and suites of offices. It is proposed to establish an industrial and agricultural museum of a permanent character in the building, which should form a most useful reference to the productions and capabilities of the district. The opening of the building was inaugurated by the holding of the "Canterbury Jubilee Industrial Exhibition, 1900," commemorating the establishment of the province fifty years before, and forming an excellent index to the progress of the district since that time. The exhibition was confined to colonial products, but the bulk of the exhibits were produced in the district. It remained open for three months—from the 1st November, 1900, to the 31st January, 1901—was visited during that time by about 250,000 persons, and yielded a profit to the Industrial Association (as promoters) of about £3,000.

Recreation and amusement are provided for by the Canterbury Hall (already referred to), Theatre Royal, Opera House, and various public halls, the famous Riccarton racecourse, the numerous cricket and football grounds, &c., while boating men have the River Avon and the Heathcote estuary.

Christchurch is connected with the outside world by Port Lyttelton, seven miles distant. The railway-tunnel of 1¾ miles in length, through the Port Hills, is on this line. Christchurch is not only the centre of the splendid Canterbury Plains, but is also one of the chief railway centres of the colony. Addington railway-workshops are extensive and fully equipped.

Lyttelton, the chief port of the district, is situated on the northern shores of the inlet of that name, sometimes called Port Cooper. The surrounding country consists of high precipitous hills, which separate the harbour from Christchurch and the plains; but by the construction of the railway and tunnel the natural difficulties have been overcome, with the result that the whole of the imports and exports of northern and central Canterbury pass through Lyttelton. The origination and accomplishment of this great engineering work is due to the late William Sefton Moorhouse, at that time Superintendent of the Province. The natural advantages of the port have been enhanced by reclamation and harbour-works, which include two breakwaters, 2,010 ft. and 1,400 ft. in length respectively, extending from Officer and Naval Points, enclosing about 107 acres; long lengths of wharf accommodation, 10,041 ft.; a patent slip for ships up to 400 tons; and a splendid graving-dock 450 ft. long, width on top and bottom 82 ft. and 46 ft. respectively, the entrance being 62 ft. wide, well equipped with machinery and all requisites for repairs. Ships drawing up to 25 ft. can berth alongside the spacious wharves and sheds. The railway, electric-light, machinery, and appliances are available throughout, which renders loading and unloading practicable both by day and by night. As an indication of the volume of trade dealt with at the port, it may be noted that for the year ended March 31, 1903, the imports were valued at £1,782,508 and the exports at £2,778,984. The town nestles on the side of the range, the streets being generally steep, flanked by solid stone buildings; and a background of green spurs and bold rocky faces gives to the whole a charming and picturesque appearance. The water-supply is obtained from artesian wells on the Christchurch side of the hills. To Christchurch there is a bridle-track over the range, and a carriage-road *viâ* Sumner. The harbour is well defended by fortifications and batteries on Ripa Island and the mainland. The population at last census was 4,023 persons.

Timaru, the third town in importance, is situated on the coast and railway-line between Christchurch (100 miles) and Dunedin (131 miles). The boundaries of this borough were extended in 1898, the estimated area, including town belt, being now 1,100 acres. It has a well-constructed artificial harbour, the port of shipment for the agricultural and pastoral districts of Geraldine, Timaru, and Waimate. The harbour is enclosed by a breakwater built of blocks of concrete; a rubble wall—the North Mole—starts from the shore a quarter of a mile away to the north, and extends easterly to a point 350 ft. from the breakwater. The enclosed space is 50 acres. During the year ended March 31, 1903, the value of goods imported here was £147,036 and of produce exported £810,352. The town is picturesquely situated on rolling hills overlooking the sea. The streets are irregular, but the public and commercial buildings, churches, and private houses are generally well and handsomely built of stone. The chief industries are meat-freezing, saw-milling, flour-milling, &c. The town has a good high-pressure water-supply, and is connected by well-made roads with the surrounding districts, and by rail with Fairlie, the route to the Mackenzie Country and Mount Cook. The population at last census was 6,424 persons.

Of other towns in Canterbury the following deserve mention: Rangiora, population, 1,768 persons, twenty miles from Christchurch by northern line of railway, is situated in the centre of a fine farming country, and possesses manufactories, including flax-mills, flour-mill, and brewery. The town and neighbourhood are much benefited by plantations.

Kaiapoi, on the Waimakariri, population 1,795, about fourteen miles from Christchurch by the northern railway-line, lies in a rich farming country, rendered

pleasing and attractive by the extent and variety of plantations and gardens. There are factories and various industries, including ham- and bacon-curing, saw-mills, brewery, and agricultural-implement works. Here also is the famed Kaiapoi Woollen-mill, which employs 600 hands when trade is brisk. The Waimakariri is navigable for small vessels to the centre of the town.

Ashburton, the newest of the towns, has a population of 2,322, and is fifty-three miles from Christchurch on the southern trunk line. It is a well-built town, with extensive and beautiful recreation-grounds and gardens. It owes its existence to the settlement of the plains, the surrounding country being well adapted for farming. There are meat-freezing works, a cordial-factory, flour-mills, gasworks, ironworks, woollen-mill, brickworks, &c.

Geraldine, population 868, is situated on the Waihi River, four miles from Orari Railway-station, about eighty-six miles south-west from Christchurch. It is a neat and pretty town, in a first-class farming district, and has a beautiful park of native forest-trees.

Temuka, eighty-eight miles from Christchurch, on the southern railway-line, is a well-built town, with good agricultural land all round. It possesses flour-mills, a butter- and cheese-factory, brewery, foundry, fellmongery and paper-mill. There is a beautiful park and domain. The population of the borough is 1,465 persons.

Waimate, population 1,359, is situated on the Waihao Forks Railway, about four miles from Studholme Junction, some 111 miles from both Christchurch and Dunedin. This town is the centre for an extensive back-country, and a splendid agricultural area. It owes its origin to the sawmill industry of the Waimate bush. Industries: saw-milling, flour-milling, &c.

Akaroa, population 559, situated on the noble harbour of that name, was founded in 1840, in the first instance by the French. It is a quiet, picturesque little place, much patronised by Christchurch residents and others as a summer resort and watering-place. It was here that Captain Stanley hoisted the British flag on 11th August, 1840, when he took possession of the Middle Island on behalf of the Crown, forestalling the French by a few hours only. A suitable obelisk commemorating this event has been erected on the spot.

THE OTAGO LAND DISTRICT.

DAVID BARRON, Commissioner of Crown Lands and Chief Surveyor.

Boundaries and Area.

The Otago Land District lies between the 44th and 47th parallels of south latitude, and extends from 167° 20′ to 171° 10′ of east longitude. It is bounded on the north by the Canterbury Land District; on the south-east and south by the ocean; on the west and south by the Waikawa, Mokoreta, Slopedown, Waikaka, Chatton, Wendon, Waikaia, Gap, Rockyside, and Kingston Survey Districts, the western and southern shores of Lake Wakatipu, the Mid-Wakatipu, Mavora, Swinton, Eglinton, Arran, and Doon Survey Districts, and a straight line from the north-east corner of the last-mentioned district to the nearest arm of George Sound, and by George Sound to the ocean; and on the north-west by the ocean to Big Bay.

The district measures about 160 miles from Milford Sound on the west coast to Waikouaiti Bay on the east coast, and the same distance from north to south. Its area is 9,482,800 acres.

Physical Description.

The country generally is mountainous, the highest land being to the north-west, and culminating in Mount Aspiring, 9,960 ft. above the level of the sea.

The west coast mountains are remarkably rugged and grand; and of the thirteen sounds that pierce this coast, three are within the limits of the Otago Land District, the remaining ten being on the west coast of the Southland District. These three are Milford Sound, Bligh Sound, and George Sound. Milford Sound

Y.B.

Hagley Park.

though only eight miles in length, contains some of the grandest scenery in the world; and fourteen miles inland from its head is the great Sutherland Waterfall, 1,904 ft. high, possibly the highest waterfall known. Bligh Sound is smaller than Milford, and not nearly so interesting; but George Sound is larger, and very picturesque.

A tourist track has been opened from the head of Te Anau Lake to Milford Sound, and a practicable route has also been discovered, and a track formed, from the north-west arm of the middle fiord of Te Anau Lake to the head of George Sound.

Te Anau Track.—A guide works on this track from December to April. He carries a fortnightly mail between Lake Te Anau and Milford Sound, and also meets each trip of the "Waikare." There is ample accommodation for tourists who wish to make the journey in short stages, as there are huts erected at six different places on the track.

For nearly one hundred miles inland from the west coast the country is very mountainous, but at a distance of sixty or seventy miles from the south-east coast-line it begins to get gradually lower, taking the form of rolling hills and downs along the sea-shore.

Rivers and Lakes.

The largest rivers are the Clutha, Taieri, and Waitaki: the first-named drains Lakes Wakatipu, Wanaka, and Hawea; the last, Lakes Ohau, Pukaki, and Tekapo, in the Canterbury District. Te Anau, the largest lake in the Middle Island, lies partly in the Otago and partly in the Southland District. The dimensions of these lakes are as follows:—

Lakes.	Length in Miles.	General Breadth in Miles.	Area in Square Miles.	Height above Sea-level in Feet.
Te Anau ...	38	1 to 6	132	694
Wakatipu ...	50	1 to 3½	114	1,069
Wanaka ...	29	1 to 3	75	928
Hawea ...	19	3	48	1,062
Ohau ...	11	1 to 3	23	1,720
Pukaki ...	11	2½ to 5	31	1,588
Tekapo ...	15	1 to 3½	32½	2,325

These lakes are situated in mountainous country; they are of glacial origin, and all very deep.

On Wakatipu there are large Government steamers, which run from Kingston, at the southern end, to Glenorchy and Kinloch, at the head of the lake.

On Lakes Wanaka and Te Anau smaller steamers are in use.

The Clutha River is the largest in New Zealand, and is estimated to discharge over 1,000,000 cubic feet per minute. It has a rapid current, but is navigable for small steamers for a distance of forty miles from its mouth. The Waitaki is not a navigable river. For some seventeen miles from its mouth the Taieri River is affected by tides, which run up one branch into Waihola Lake, and up the other branch as far as Allanton (Greytown).

There is a small steamer on Waihola Lake, and another on the Taieri River at Henley. During the summer season both run excursion trips to the mouth of the river when required. The distance in each case is about eight miles.

Plains.

There are some considerable areas of tolerably level land in the interior, the largest being the Maniototo Plains, the Idaburn, Manuherikia, and Upper Clutha Valleys. Their dimensions are approximately as follows: Maniototo Plains, length, twenty-eight miles; average breadth, ten miles; Idaburn Valley, twenty-five miles by four miles; Manuherikia Valley, thirty-five miles by four miles; Upper Clutha Valley, thirty-three miles by five miles.

The Taieri Plain, nearer the coast, is about the same size as the Idaburn Valley, and is very fertile. Other plains are the Waitaki in the north, the Tokomairiro, the Strath-Taieri, the Tapanui, and the fertile Inch-Clutha, lying between the two branches of the Clutha River, and consisting entirely of alluvial deposit. There is also a good deal of low country, chiefly rolling downs, on the south-west side of the Clutha near the sea.

Forests.

The forest-land lies mostly along the sea-coast, the largest area of bush being Tautuku Forest, about forty miles in length and fifteen miles in breadth. The western part of this forest is in the Southland District. The other principal forest areas are in the following localities, viz.: north of Dunedin, east of the Tapanui mountains, in the upper valley of the Waikaia River, and towards the north-west coast.

The forests of Otago contain a large variety of useful timber, both hard and soft wood; some being suitable for building purposes, while other varieties are highly ornamental, and much prized for cabinet-work.

Building Stones.

Building-stones of good quality are found in various places throughout Otago. The Port Chalmers quarries afford an inexhaustible supply of bluestone, a basaltic stone of great hardness and durability; and the neighbourhood of Hindon furnishes a bluestone of superior quality. In Otago central a hard, close sandstone is obtained near Kokonga. A hard freestone of excellent quality is found at Waikawa, where there is a large hill of it close to the water's edge. Blocks of very great size can be obtained. There is also a freestone of superior quality on the property lately owned by the late Hon. W. J. M. Larnach at the Peninsula. A dense dark granite is obtainable on Ruapuke Island; specimens, both tooled and polished, may be seen in the base and pilasters of the new Government Life Insurance Buildings at Dunedin. A soft white building-stone—the well-known Oamaru limestone—is found in large quantities along the railway-line near Oamaru, from whence a good deal is exported to other parts of New Zealand and to the Australian States. A similar kind of stone is found at Otekaike, about two miles from the railway-station, and it may be interesting to note that during the years 1891–93 about 3,000 tons of stone were sent from the Otekaike quarries to form the facings of the Melbourne Fish-market.

Limestone for Burning.

Limestone is found in the following places: Oamaru, Otekaike, Otepopo, Waihemo Maniototo Plains, Waikouaiti, Lower Harbour, Peninsula, Waihola, Millburn, and Wakatipu.

The Millburn Lime and Cement Company burn large quantities of lime at their Millburn works, whence it is sent to all parts of Otago, for building purposes, gasworks, &c. It is also largely used in farming, and the productiveness of the Tokomairiro Plain has been greatly increased of late years by its application to the soil. Large cement-works belonging to the same company have been open for some years on the reclaimed land in Otago Harbour, near Dunedin. The cement manufactured at these works is considered fully equal, if not superior, to the best imported, and is largely used in building and other constructive works.

The Government have constructed a branch railway to the lime deposits on the Makareao Estate, Waihemo, having tested the same with satisfactory results, the lime produced being of exceptionally good quality.

Coal and Lignite.

No first-class coals have yet been discovered in Otago suitable for ocean-going steamships. In the southern portion of the district and in part of Southland thin seams of coal of a bituminous character exist, but so far nothing of a commercial value has been found. These coals are of Mesozoic age. First-class brown

Y.B.

Cathedral Peaks, Manapouri.

coals are worked in several parts of Otago and Southland, the principal seats of the industry being Shag Point, Green Island, Kaitangata, and Nightcaps. Considerable quantities of brown coal are now being mined in Central Otago, the dredging requirements having considerably increased the output in this district.

Beds of lignite are also found in numerous localities, chiefly round the margins of the old lake-basins and along the courses of the older river-valleys, and are worked on a sufficient scale to supply local requirements.

The output of coal and lignite in Otago and Southland for 1902 was 397,396 tons, an increase of 30,475 tons on previous year. In addition, 2,338 tons of oil-shale were raised at the Orepuki Mine for reduction at the works on the premises.

Climate.

The climate of Otago varies greatly in different neighbourhoods, and sometimes a distance of a few miles only separates districts very dissimilar in this respect. A large area in the interior of Otago has what may be called a dry climate. This area includes the Maniototo Plains, the Idaburn and Manuherikia Valleys, and extends to Lakes Wakatipu, Wanaka, Hawea, and Ohau on the west and north, and to the Waitaki River on the north-east. From Oamaru the direction would be across country to the Lammerlaw Ranges, and thence to Mount Benger and the southern end of Lake Wakatipu. This part of the country is well adapted for sheep of all kinds, especially merinos. Some of the runs in the hilly country are capable of carrying 20,000 sheep.

West Coast.

In marked contrast to central Otago is the West Coast District, which may be described as having a wet climate. Not that the number of wet days in the year is very great, but it is subject to very heavy rains from the north-west, the fall generally exceeding 100 in. per annum. But, although wet, the climate is mild, and the vegetation is consequently luxuriant. The only settlers of this part of the country are Mr. and Mrs. Sutherland, who keep a house of accommodation for tourists at the head of Milford Sound. There are very few visitors to the Sounds during winter, but in summer the tourist traffic is considerable. Towards the south-east and south coasts of the district the climate is moist, being somewhat similar to that of Dunedin, where the average rainfall is 35 in., distributed over 163 days in the year.

Fruit.

There are some fine fruit-growing districts in the valley of the Clutha, from below Roxburgh right up to Lake Wanaka. The summers are dry and warm, and the soil suitable. Apricots, peaches, &c., come to maturity fully a month before they do at Dunedin, and grapes ripen in the open air. There is a great future for this neighbourhood in the growing of those varieties of fruit which agree with and thrive in a dry climate. The grape might be cultivated either for wine-making or for the table, and some varieties could be made into good raisins. The dryness of the atmosphere is favourable for preserving all kinds of fruit, while the Otago Central Railway will bring the neighbourhood into direct communication with a market.

Crops.

Cereals of all kinds do very well over nearly the whole of the provincial district, which includes Southland. The following are the agricultural statistics:—

Total area under cultivation in the provincial district, including sown grasses and fallow land, 2,332,338 acres. Corn crops sown for threshing, comprising wheat, oats, barley, rye, maize, peas, beans, 278,955 acres; land broken up and grassed, 1,446,575 acres, and 3,407 acres in clover, while 312,251 acres have been surface-sown with grass without the land being first broken up; green-crops, comprising potatoes, turnips, mangolds, rape, beet, carrots, &c., 264,626 acres; plantations, &c. including private gardens, market gardens, orchards, and vineyards of a quarter-acre and upwards, 11,845 acres, and 20,433 acres ploughed but not planted. The area in tussock, or native grass, is 8,173,639 acres.

	Acres.	Estimated Yield per Acre.	Total.
Wheat for threshing ...	42,688	37 bushels	1,600,188 bushels.
Oats „ ...	230,082	42 „	9,841,325 „
Barley „ ...	4,310	36 „	158,791 „

Stock.

The total number of sheep in Otago Provincial District, which includes Southland, on the 30th April, 1902, was 3,965,342, of which number about 700,000 were merinos. On an average, about one-third of the flocks consist of breeding-ewes. The shearing is mostly done by hand, but the Wolseley shearing-machines have been introduced on about ten stations, the number of machines in each wool-shed varying generally from ten to fifteen, though there is one shed at Benmore, near Lake Ohau, where there are twenty-eight machines driven by a turbine.

The above-mentioned district had also, in October last, 57,698 horses; 202,211 cattle; and 22,920 pigs.

The rabbit-pest is still a severe tax on the stockowners. The number of skins exported last year from Otago was 5,897,367; the monetary value being £50,396.

Freezing Establishments.

There are nine meat-freezing and preserving-works in Otago. The principal freezing establishments are at Oamaru, at Burnside, and at Port Chalmers. At Oamaru there are two Bell-Coleman machines, and a 60-ton Hercules refrigerator, capable of freezing 1,200 sheep a day, and there is storage-room for 20,000 carcases. At Burnside there is a 70-ton Hercules machine, capable of freezing 2,000 carcases per day, and storage-room for 50,000 carcases. The Port Chalmers freezing-works, erected in 1896 by the Otago Dock Trust, cost £4,500. They are used principally for the storage of butter prior to shipment, but the freezing-chambers have also been used for sheep, rabbits, and fish. The refrigerating machinery includes a 12-ton Hercules refrigerator. The capacity of the building is 30,000 cubic feet, and 50 tons of butter can be handled per week. The capacity has lately been nearly trebled, at an additional cost of £8,500. These additions include a 35-ton Hercules refrigerator.

Woollen-mills.

There are four woollen-mills at work in Otago, employing some 974 hands. The amount paid in wages is about £64,594 per annum, and the machinery is 800-horse-power. £80,000 worth of wool and other materials are used per annum, and the turn-out of manufactured goods exceeds £181,000 yearly. The woollen industry in Otago is of greater magnitude than in any other district of New Zealand, notwithstanding the fact that the Bruce Woollen-mill, one of the newest and smallest, was totally destroyed by fire on the 28th April, 1901. It is now restored.

Besides supplying local needs Otago Provincial District exported last year 23,860,360 lb. of wool, having a value of £552,414.

Clothing-factories.

In clothing-factories, also, Otago takes a prominent place, having eight, employing 778 hands, whose wages amount to £33,200 per annum.

Dairy Factories.

The following is an extract from last annual report of the National Dairy Association of New Zealand (South Island):—

"There is no cheaper or surer way of keeping the land in good heart than by combining dairying with other farming branches, and the outlook as to future prices for dairy produce is at least as good as that for grain or meat. We cannot have closer settlement and prosperity if dairying is neglected."

The Taieri and Peninsula Company continue to extend and increase, and have absorbed a good many of the smaller cheese-factories. The cheese-factories still, however, make progress.

Total amount of cheese and butter shipped to London during season 1902–1903 from Otago and Southland: Cheese, 2,083,087 lb.; butter, 1,284,418 lb.

Manufactories and Works.

Under this head the census returns of 31st March, 1901, gave within the Otago Provincial District—13 meat-preserving works; 12 bacon-curing establishments; 13 fish-curing establishments; 42 butter- and cheese-factories; 27 grain-mills; 7 biscuit-factories; 2 jam-factories; 4 confectionery-works; 15 breweries; 8 malt-houses; 17 aerated water and cordial factories; 2 sauce- and pickle-factories; 4 soap- and candle-works; 4 cooperages; 70 sawmills and sash-and-door factories; 5 gasworks; 5 lime- and cement-works; 25 brick-, tile-, and pottery-works; 11 tinware-factories; 14 iron- and brass-foundries; 8 engineering-works; 12 agricultural-implement factories; 49 printing establishments; 20 coach building and painting establishments; 21 cycle-works; 20 saddlery- and harness-factories; 33 fellmongeries, tanning, currying, and wool-scouring establishments; 9 ship- and boat-building yards; 7 sail-, tent-, and oilskin-factories; 32 furniture-factories; 8 clothing factories; 2 waterproof-factories; 7 hosiery-factories; 35 boot- and shoe-factories; 4 rope- and twine-works; and 16 flaxmills.

The total number of works of the above description in the Otago Provincial District was 809. The motive power employed comprised 295 steam-engines, 43 water-engines, 98 gas-engines, 4 oil-engines, 21 worked by horse and 3 by electricity, making a total of 464, with horse-power amounting to 8,390. The number of hands employed was 8,745 males and 3,057 females, who received in wages £733,671 and £96,069 respectively. The value of materials used or operated upon in 1900 was £1,741,981, while the approximate value of the manufactures, &c. (including repairs), was £3,749,497. The approximate value of the land, buildings, machinery, and plant totalled £1,862,858. The above amounts are exclusive of Government railway workshops.

Under the head of mining there were 26 gold quartz-mines, 68 hydraulic gold-mines, 121 gold-dredges, and 105 coal-mines in operation.

Gold Production.

Otago produces about one-third of all the gold taken out in New Zealand.

Gold is found very generally distributed throughout Otago, except in the southern portion of the district. The principal localities are: Clutha Valley, Tuapeka, Shotover, Cardrona, Tinker's, St. Bathan's, Mount Ida, Nevis, Bannockburn, and Maerewhenua.

Last financial year the Otago Provincial District produced 192,079 oz. of gold, having a value of £771,892.

Chief Towns.

The following are the chief towns of Otago, with their population at last census, including all having 1,000 inhabitants and upwards: Dunedin, and suburbs, 52,390; Oamaru, 4,836; Port Chalmers, 2,056; Mosgiel, 1,463; Milton, 1,241; Kaitangata, 1,463; Lawrence, 1,159; Balclutha, 1,017.

City of Dunedin.

Dunedin, the capital city of Otago, is situated at the head of Otago Harbour, which is divided into two parts—the upper and lower. The lower harbour is six miles long from Taiaroa Heads to Port Chalmers. The upper harbour, from Port Chalmers to Dunedin, is seven miles in length. Dunedin and Port Chalmers are also connected by railway.

Although the hills surrounding Dunedin are rather tame in character and outline, the city itself is picturesquely situated. The business part of it is on level land near the harbour, and the residences occupy the sloping hills which rise on the west side of the city. The city proper is about two miles and a half long by seven-eighths of a mile wide, and is bounded on the land side by what is called the Town Belt. This reserve averages one-fifth of a mile in width, and comprises 500 acres, a great part of which is virgin bush. A pretty road, called the Queen's Drive, has been laid out through the Belt from end to end, from which many fine views of the town and harbour can be obtained.

It is thirteen miles down the harbour to the Heads in a north-easterly direction, but the Ocean Beach, lying to the south-east, is only two miles from the centre of

the city, and the favourite seaside resort—St. Clair—is about three miles. Trams run to both these places at short intervals. The city is also connected with the suburban boroughs, lying on the hills overlooking the town, by excellent cable-tramways. The Botanical Gardens to the north of the city are well laid out, the native bush contrasting with the cultivated parts. The Reservoir also, which is within easy walking distance, and the drive to Blueskin Bay, have many beauties.

Dunedin is well supplied with elementary schools, there being six large schools in the city proper, with an attendance of 3,355 pupils, and ten more in the suburbs, with 3,624 pupils.

There is also in Dunedin a training-college for teachers. The students in training number seven men and ten women. They devote every fifth week during the session to practice in teaching and management of classes in the ten associated schools of the city and suburbs.

The School of Art and Design is in the same building as the Normal School, and has a staff of five teachers and a pupil-teacher. In 1902 there were 387 students in attendance.

The Otago Boys' High School stands on a commanding plateau 300 ft. above the business part of the city and the harbour. The school was opened on the 3rd August, 1863, in the building in Dowling Street now occupied as the Girls' High School. The new buildings in Arthur Street were opened by the late Sir William Jervois, Governor, in February, 1885. The teaching staff, including the Rector, numbers eleven; the attendance is about 236.

The Otago Girls' High School was opened on the 6th February, 1871, with a roll of 78 pupils. The present attendance is 152, with a teaching staff of 9, exclusive of visiting teachers. Otago holds the proud distinction of having established the first Girls' High School in Australasia. Among the earnest band of workers who laboured to establish this first High School for girls the name of Miss Dalrymple stands pre-eminent, and will ever be held in grateful remembrance by the people of Otago.

At the commencement of the present year the Board of Governors accepted the Government's offer in connection with providing free secondary education by admitting sixty-three boys and fifty-one girls who passed the sixth standard in the primary schools and were under fourteen years of age on 31st December last, on payment by the Government at the rate of £6 per annum per head.

The Board is also providing free education to twenty-three boys and twenty-four girls in terms of Government regulations.

It is probable that the number of Government scholars will be considerably augmented.

The Otago University was founded in 1869, and opened in 1871. It is well housed in a handsome pile of buildings in the domestic Gothic style. There are three separate faculties in the University—viz., Arts and Science, Medicine, and Mining. The School of Medicine provides the full course for a Medical degree of the University of New Zealand. There is a Medical Museum in the University buildings containing anatomical, pathological, and other preparations and models. The teaching staff numbers at present twenty-six professors and lecturers. The School of Mines occupies a separate (temporary) building. There are at present about sixty students going through the prescribed courses for the diplomas and certificates in the Mining, Metallurgical, Geological, Mine and Land-surveying and the Assaying Divisions. Of undergraduates keeping terms there are 248—viz., 191 men and 57 women. The University Library contains over 5,000 specially selected volumes, and is open to the public under certain conditions for purposes of reference. The Chemical and Physical Laboratories are well fitted up, and furnished with all necessary instruments and appliances. There are six scholarships tenable at the University, ranging in value from £15 to £30 per annum.

The public Museum, of which the Professor of Biology is Curator, is under the control of the University Council. It is situated in Great King Street, about five minutes' walk from the University. There is a public Art gallery attached, which contains some good works of art. Up to the present time only the central portion of the original design for the Museum building has been erected.

The Dunedin Athenæum and Mechanics' Institute possesses a fine library of over 21,000 volumes, and a membership of about 1,000 subscribers. Besides the Circulating Library there is a Reference Library, and a very large reading-room, well supplied with newspapers and magazines, and chess and smoking-rooms. During the past year the building has been greatly enlarged, over £2,000 having been spent on improvements.

There are some fine specimens of architecture in Dunedin, the buildings for the most part having an air of permanence and solidity. Some of the churches are very handsome. The First Church, in Moray Place, and Knox Church, in George street, are both handsome stone structures, and St. Joseph's Cathedral (Roman Catholic) is built of stone in the decorated Gothic style. The portion at present constructed will seat 1,000 persons, and has cost £23,000.

The Cargill Monument, which was erected to the memory of the late Captain Cargill, the founder of the Otago settlement, stands in the Triangle, between the Customhouse and the Bank of New Zealand. It is an ornate specimen of early decorated Gothic.

Towns and Surrounding Country.

Port Chalmers (eight miles from Dunedin) situate on Otago Harbour, midway between the Heads and Dunedin, has a population of over 2,000. It is the chief port of Otago, and possesses every accommodation for Home vessels, including dry dock, 80-ton sheer-legs, steam-hammer, and other appliances, besides several private foundries, cool-storage chamber, &c. The Port Chalmers graving dock is described in the article on page 64.

Leaving Dunedin by the northern railway, winding in and out through the hills which surround the town, and skirting the precipitous cliffs of the coast-line, the first station of importance reached is Waitati, a favourite seaside resort in Blueskin Bay; distance, seventeen miles. Fifteen miles beyond is Waikouaiti; population, 690; pleasantly situated on the Hawksbury lagoon, the centre of a flourishing farming country. The next place of note is Palmerston, forty-one miles from Dunedin, with 738 inhabitants. A branch-line leaves Palmerston and runs nine miles up Shag Valley to Dunback. Six miles further on the main line there is a branch to Shag Point, a coalfield, with two pits being actively worked.

Oamaru (seventy-eight miles) is the second town in Otago, having a population of about 5,300. It is the centre of a large farming district, and has a good harbour, formed by a concrete breakwater, for the reception of ocean-going ships. The chief exports are wool and grain. A branch-line runs from the junction near Oamaru up the Waiareka Valley to Ngapara, seventeen miles, and Tokarahi, twenty-five miles from Oamaru, and another seven miles by road brings us to Livingstone.

Starting from Oamaru, and proceeding to Central Otago, *viâ* the valley of the Waitaki River, the first part of the journey is accomplished by rail across the fertile Papakaio Plains to Awamoko (ninety-six miles), and thence following up the Waitaki River past Duntroon to Kurow (120 miles from Dunedin). At Kurow the traveller leaves the railway and follows the course of the Waitaki through pastoral country to Rugged Ridges Station (133 miles); a little beyond Rugged Ridges the road leaves the Waitaki River, and crossing the Ahuriri Pass (141 miles), strikes the Ahuriri River, which it follows up past Omarama Station (158 miles) to the junction of Longslip Creek; it then ascends this creek until Lindis Pass saddle is reached (172 miles), at a height of 3,185 feet. Here begins the descent to the Clutha Valley *viâ* Morven Hills Station (181 miles) and Tarras Station (200 miles). From Tarras Station the road runs through settled farming country up the Clutha River, which is crossed by means of a punt at Newcastle (219 miles), and four miles more brings the traveller to Pembroke, on the southern shore of Lake Wanaka.

From Dunedin the main trunk railway runs southward to Invercargill, a distance of 139 miles. Passing through the Caversham Borough and tunnel the traveller reaches Burnside (four miles) and Abbotsford (five miles), industrial centres, with coal-mining, tanning, iron-smelting, and other works. Four miles farther on is Wingatui, the junction of the Otago Central Railway; and ten miles from Dunedin is Mosgiel, a rising township with 1,463 inhabitants, noted for its woollen-mills. The railway-line now skirts the Taieri Plain, an alluvial flat eighteen miles long by five miles

broad; the most fertile portion of Otago. A branch-line nine miles long from Mosgiel junction runs to Outram, on the farther side of the Taieri Plain. Passing the smaller Townships of Allanton (Greytown) and Henley, and Lakes Waihola and Waipori, the main line strikes Milton (thirty-six miles). Milton, in the middle of the Tokomairiro Plain, is a town of 1,241 inhabitants, with flour-mill, dairy factories, flax-mill, pottery works, and tannery. The next place of importance is Balclutha (fifty-three miles), on the banks of the Clutha River, with flax-mills, dairy factories, and chicory works; population 1,017. Kaitangata, situated lower down the Clutha River, and connected by a branch-line four miles long, has extensive coalfields, and a population of about 1,500. Leaving Balclutha, the main line runs through the Clutha downs, passing the small centres of Waitepeka, Warepa, Kaihiku, and Waiwera, and reaches Clinton (seventy-four miles), on the Waiwera stream, a favourite resort of anglers. The next station of note beyond Clinton is Waipahi Junction (eighty-four miles), on the Waipahi River, likewise a favourite fishing-ground. Further on is Gore (100 miles), on the Mataura River, in the Southland District. Gore is a fast-rising township of some 2,600 inhabitants, with paper-mill, flour-mill, freezing-works, dairy factory, coal-mines, &c.

A branch-line from Waipahi follows up and crosses the Pomahaka River and connects Tapanui (107 miles), Kelso (110 miles), and Heriot (114 miles). An extension of this line for a distance of over six miles to Edie's is under construction.

The Otago Central Railway starts from Wingatui, crosses the Taieri Plain, and then winds round to the Taieri River, which it follows up to the present terminus at Ida Valley. In its course along the river it runs for some distance through a rocky gorge, but after crossing the Sutton Stream enters Strath-Taieri—a comparatively flat, open country. Near Hindon Station (twenty-five miles from Dunedin), in the Taieri Gorge, and Barewood (thirty-seven miles), there are quartz-reefs being worked. In traversing the Strath-Taieri the line passes the Blair-Taieri Village Settlement (forty-four miles), Middlemarch, a rising township (forty-eight miles), and reaches Hyde (sixty-four miles). The present limit is Ida Valley (106 miles), but the line is under construction for a further distance of about fifteen miles, passing through the Poolburn Gorge and across the Manuherikia River to about a mile beyond Spottis Creek. The extension of the line to Clyde presents no engineering difficulties. Central Otago has a great future before it, as in the opinion of experts it is naturally adapted for producing fruit of all kinds in perfection.

Another means of access to Central Otago is by the Clutha Valley.

Two miles beyond Milton the Lawrence branch leaves Clarkesville Junction, runs up the Tokomairiro River and the gorge of Manuka Creek, and down to Waitahuna (fifty-three miles from Dunedin), and Lawrence (sixty miles), gold-mining centres, with an aggregate population of about 1,500. Gold was first discovered here in 1861, and the mines are still yielding freely. From Lawrence a coach runs to Beaumont (seventy-two miles), on the Clutha River. Crossing the Beaumont Bridge the road follows the west bank of the Clutha, passing numerous dredging-claims. At eighty-nine miles is Ettrick, and seven miles further on is Roxburgh—the Teviot—(ninety-six miles), a town of 478 inhabitants. Recrossing the Clutha River by the Roxburgh Bridge, and proceeding up the east bank, the traveller reaches Alexandra South (124 miles), at the junction of the Manuherikia River with the Clutha, and Clyde—the Dunstan—(130 miles), the chief town of Vincent County. The next place of importance is Cromwell (143 miles), at the junction of the Kawarau River with the Clutha. Cromwell is a small town of 642 inhabitants, and has a good bridge over the Clutha River. If the traveller wishes to pursue his journey farther he can either follow the road up the Clutha to Newcastle and Pembroke, on Lake Wanaka, or take the Kawarau Gorge road by way of the Crown Terrace to Queenstown, on Lake Wakatipu.

Queenstown, a picturesque township situated on the shores of Lake Wakatipu, has a population of 690, and is the centre of a large gold-mining district. The chief feature of Queenstown is the grand mountain and lake scenery in the neighbourhood, which attracts large numbers of tourists every year. There are two ways of reaching Queenstown—the one by the Clutha Valley and Kawarau Gorge, as above described, and the other by rail to Kingston, at the foot of Lake Wakatipu, and thence by steamer, which runs to suit the trains.

The Tautuku bush, in the south of Otago, has only lately been opened up, but already a large number of settlers are making their homes there. Starting from Balclutha the Catlin's River branch-line runs southwards to Romahapa (sixty-one miles from Dunedin) on the crossing of the main road to Port Molyneux, thence to Glenomaru (sixty-five miles), and Owaka (seventy-two miles from Dunedin), and is being constructed to Catlin's Bridge, four miles further on. The Catlin's-Waikawa main road is formed the whole way through, as are also numerous district roads, and the adjacent lands are being taken up as fast as they are thrown open.

Railways.

The principal lines are as follows: (1.) The main trunk line from Dunedin to Christchurch, with branches from Oamaru to Hakataramea, forty-three miles; and Oamaru to Ngapara and Tokorahi, twenty-five miles; also, Palmerston to Dunback, nine miles. (2.) The main trunk line, Dunedin to Invercargill, with branches, Mosgiel to Outram, nine miles; Milton to Lawrence, twenty-four miles; Stirling to Kaitangata, five miles; Balclutha to Owaka, nineteen miles; and Waipahi to Heriot, twenty miles. (3.) The Otago Central, from Wingatui to Ida Valley, ninety-eight miles.

Statistical.

The total population of the Otago Provincial District on the 31st March, 1901, was 173,145.

Area of Otago Land District: Open land below 2,000 ft., 5,300 square miles; forest-land below 2,000 ft., 1,960 square miles; open land above 2,000 ft., 6,777 square miles; forest-land above 2,000 ft., 500 square miles; area of lakes, &c., 280 square miles: total, 14,817 square miles, or 9,482,800 acres.

The following table shows the disposition of the land in the Otago District on 31st March, 1903:—

	Holdings.	Acres.
1. Lands finally alienated, comprising freehold land and vested reserves	...	2,818,995
2. Lands held on deferred payment, rural	45	12,949
3. Lands held on perpetual lease, rural	251	48,595
4. Lands held under occupation-with-right-of-purchase clause	229	39,956
5. Lands held on lease in perpetuity, ordinary Crown lands, rural	638	165,182
6. Lands held under agricultural lease on goldfields ...	16	535
7. Lands held under Mining Districts Land Occupation Act	158	5,612
8. Lands held under village settlement, deferred payment ...	3	130
9. Lands held under village settlement, perpetual lease ...	17	364
10. Lands held under village settlement, lease in perpetuity ...	119	1,733
11. Lands held under village-homestead special settlement, perpetual lease	77	1,215
12. Lands held by special-settlement associations, lease in perpetuity...	14	2,765
13. Lands held as small grazing-runs	266	534,338
14. Lands held under pastoral license, not including bush ...	237	4,519,101
15. Lands held under lease and license for miscellaneous purposes, exclusive of gold-mining	564	88,536
16. Lands acquired and disposed of as lease in perpetuity under Land for Settlements Act, rural	409	56,075
17. Lands acquired and disposed of as small grazing-runs under Land for Settlements Act	3	3,667
18. Lands acquired and disposed of as pastoral homestead sites under Land for Settlements Act	2	954
19. Lands acquired and disposed of as miscellaneous licenses under Land for Settlements Act	48	762
20. Crown lands open for selection (including Land for Settlements Act), exclusive of pastoral lands	...	54,481

	Holdings.	Acres.
21. Crown lands being prepared for selection (including 548 acres under Land for Settlements Act)		82,600
22. Land open for application under pastoral licenses		42,287
23. Lands held by aboriginal natives		16,500
24. Lakes, and Clutha and Taieri Rivers		179,200
25. Balance of Crown lands, including mining reserves, public reserves not vested, bush-lands, roads, barren country, &c. ...		873,315
Total area of district (14,817 square miles),		9,482,800

Tenants of lands included in 2, 3, and 4 have the right of acquiring the freehold. There is no right of acquiring the freehold for tenants of lands included in 5, 6, 11, 12, 13, 14, 15, 16, 17, 18, and 19. From item No. 1 should be deducted 67,047 acres, having been acquired under Land for Settlements Act, and absorbed in items Nos. 16, 17, 18, 19, and part 20. The summation of items exceeds total area of district by this amount.

THE SOUTHLAND LAND DISTRICT.

J. HAY, Chief Surveyor.

Physical Features.

The Southland District, comprising the Counties of Fiord and Stewart Island, and parts of the Counties of Southland, Wallace, and Lake, is bounded on the north and east by the Otago District, and on the south and west by the Tasman Sea, and may be said to lie between south latitudes 45° and 47° and east longitudes 166° 15′ and 169° 15′. For administrative purposes, however, the Snares, Auckland, Enderby, Campbell, Antipodes, Bounty, and all other islands within the limits of the colony south of the 47° parallel of south latitude are included in it.

Area and Nature of Lands.

The total area of the district, including Stewart Island, but exclusive of Solander, Ruapuke, and the other small islands enumerated above, is 6,966,592 acres, of which 500,000 are covered with bush. A considerable area in the Fiord County consists of immense alpine country with scrubby bush reaching to the snow-line. This little-known country extends to the western sea, and there presents the almost indescribable West Coast Sounds. The whole region is a paradise for the artist; and, indeed, for all enthusiastic lovers of nature, but has little attraction for the agriculturist or pastoralist. The bush land suitable for timber lies in the neighbourhood of Forest Hill, Hokonui, Waikawa, and on Stewart Island. The timbers of commercial value are totara, rimu, miro, matai, kahikatea, rata, and kamahi, in mixed bushes; but *Fagus fusca* and other beeches predominate on the high lands.

The open land in Southland and Wallace Counties, in its natural state, carries tussock and snow-grass, fern, flax, manuka, &c., and there is a considerable area of marshy land, interspersed here and there with peat bogs.

Perhaps the most striking feature, if we exclude the Fiord country, is the number of well-defined rivers and valleys of the district, the latter often widening out to such an extent as to form very extensive plains. Commencing with the eastern side, the Mataura, Oreti (or New River), Aparima (or Jacob's River), and Waiau are the most prominent illustrations of this; but these rivers by no means exhaust the list, as they all have numerous tributaries, which exhibit the same features on a smaller scale.

Speaking generally, the watersheds of these rivers do not attain any great height until followed far inland, and near the great lakes to be presently noticed. From what has been said above it follows that the extensive plains and valleys referred to are of alluvial formation, in many places of very rich and fertile quality,

and capable of raising crops of every known product, subject, of course, to climatic limitations. Generally these plains and valleys rise from the river-levels in a very gradual slope, sometimes into a series of terraces from 10 ft. to 50 ft. in height, and sometimes into undulating hills, intersected at frequent intervals by lateral gullies, affording natural drainage and an abundant supply of water.

These hills are covered with an indigenous growth, consisting of tussock and other grasses, fern, flax, &c., and even in their native state afford excellent grazing for sheep.

Near the large lakes, such as Wakatipu, Te Anau, Manapouri, Hauroto, and others, and between these and the West Coast, the country becomes very high, often reaching 5,000 ft. and 6,000 ft. above sea-level, with very steep and rugged spurs—this is the Fiord country before referred to. The open country occasionally presents a number of ridges and lesser mountain-tops covered with tussock and other herbage, affording admirable pasture for sheep in summer; but stock have to be removed from April to October, during which period this country is generally covered with snow.

Southland does not contain so much forest as most of the North Island districts, and this will account for its early and extensive settlement; nevertheless there are considerable areas of forest in the eastern, southern, and western parts, and on Stewart Island, and a large export trade is done in the different kinds of pine and other timbers used for building, engineering, furniture-making, &c.

From what has been said of the river systems it will be evident that the country is well supplied with water, although none of the rivers can be used for purposes of internal communication; but the plains are traversed by railways for considerable distances from the principal towns, and where the railways end communication is continued by good roads, so that there is probably no part of the colony better off for means of transit; and with the Bluff Harbour the Southland District would seem to possess every facility.

Agriculture.

Having already touched on the character of the soil, it only remains to say that the plains, terraces, and lower hills are well adapted for raising wheat, oats, and other cereals, turnips, mangolds, beets, and the various other crops common to temperate climates. Wheat is not so widely grown as it might be, for the reason, probably, that the pastoral branches of farming receive more attention than the agricultural, and wheat is not required for these; whereas oats are largely grown for export and to feed sheep in the form of chaff; turnips also are much cultivated for winter food. Where wheat is grown the yields are very satisfactory, ranging from 40 to 60 bushels per acre, while oats frequently give 80 to 100 bushels.

Linseed is now receiving some attention from farmers, as they find ready sale for it to the manufacturing chemists at remunerative prices, a fair crop yielding over £5 per acre.

Dairy-farming, &c.

Dairy-farming now forms a very important industry in this district, a number of factories having been established, the total number now in the district being 7 creameries, 6 cheese-factories, and 11 dairy factories, one being a large condensed-milk factory and one making first-class Stilton cheese.

Sheep-farming.

By far the most important industries are those connected with the raising and export of mutton and wool. Some years ago sheep-farming was much hindered by the inroads of rabbits; but owing to the repressive measures adopted there has been a marked abatement of the pest. The hill-country, although it does not carry a large proportion of stock to area, is eminently healthy. The average carrying-capacity over the whole district would probably be slightly over one sheep to the acre. Until within the last few years most of the runs were stocked with merinos, but owing to the decline in price of merino wool, and to the carcase being unacceptable to the European market, these sheep have, generally speaking, been re-

placed by Leicesters, Lincolns, Romney Marsh, Cheviot, and crossbreds of various kinds, better suited to the existing demands. A number of large establishments for slaughtering and freezing sheep are at work. One of the latest of these, erected near the Bluff Harbour, is considered to be the most complete in the colony, being provided with all possible labour-saving machinery and appliances for working up the by-products into articles of commerce.

Industrial (Coal, Gold, &c.).

Extensive seams of coal and lignite are distributed over the district, and an extensive deposit of brown coal is being developed by the Nightcaps Coal Company. This coal is largely used throughout the district, and its utility has been recognised by the Railway Department of the colony, some 40,000 tons having been used on the Southland section of New Zealand railways during the past year. In many places the annual output is considerable. A deposit of shale covering a fair area exists at Orepuki, and extensive buildings with machinery have been erected to recover the oil, wax, and other products. Peat is also found in some up-country neighbourhoods, and is used for fuel where wood and coal are scarce. Gold is found all over the district, and is being obtained either by sluicing or dredging. A considerable amount of capital has been invested in river- and beach-dredges worked by steam. Payable gold-bearing reefs exist in Preservation Inlet and at Stewart Island. Among the lesser industries the preparation of the fibre of the native flax plant (*Phormium tenax*) is worthy of notice. The plant is found all over this district, and a number of mills set up, some forty-two in number. The more remunerative and regular prices obtained during the past year will, if upheld, make this a steady industry throughout the colony.

Fish.

Salt-water fish abound in great numbers in the waters surrounding Stewart Island, and oysters are found on banks between that island and the Bluff. Fish are largely exported to Melbourne, as also the oysters during the open season. All the large rivers, and many of the tributaries, are well stocked with trout, while for heavy trout-fishing the Waiau River may be mentioned as one of the finest in New Zealand. One river—the Aparima—had salmon-spawn put into it some years ago, and, it is now believed, with success.

Fruit.

The small English fruits, such as gooseberries, currants, raspberries, strawberries, &c., grow in great profusion, as do also apples. Stone-fruits are not so common, although peaches, nectarines, apricots, &c., do well when trained against nursery-walls in favourable aspects.

Climate.

The climate is bracing in winter, and warm and genial in spring and summer. The old residents state that there has been a marked decrease in the rainfall within the last decade. No regular observations have been recorded for the last few years, but it is believed that the average is about 30 in. a year. It may, however, be observed that more rain falls near the coast than inland, and also that the rainfall is more evenly distributed throughout the year than is the case in the northern part of the colony. The temperature varies from 40° in winter to 70° in summer.

Towns.

Invercargill, the chief town, was from the first well laid out with wide streets, and liberal reserves in the town belts for recreation purposes. The Corporation exercises a paternal care in providing water, gas, and in disposing of sewage, &c., for the citizens; and the streets are well lighted, paved, and maintained. Artesian water is pumped to the top of a handsome brick tower—which, by the way, is a very conspicuous landmark—and stored there in a tank, from which most of the houses within the town boundaries are supplied. The population, including suburbs, is

nearly 11,000. Five railways concentrate here, one from the famed Cold Lakes, another from Dunedin and Christchurch, a third line communicates with the agricultural and pastoral country lying east of the Mataura River, known as the Seaward Bush line, a fourth line opens communication with the extended area westward covered by the Wallace County and known as the Western District, while the short line to the Port of Bluff carries a heavy traffic—the main produce of the district—for export. There are rope-and-twine, carriage and implement-factories, flourmills, sawmills, fellmongeries, a boot-factory, bacon-factory, brick- and pottery-works, iron-foundries, and various other industries. Good beer is brewed here, and there are three first-class hotels. The Government Buildings, lately enlarged, are on a scale not often seen in a town of the same size. A clock and chimes of New Zealand make have been placed in the central tower. Although the Bluff is the principal port, Invercargill is provided with a lesser harbour in the New River Estuary, where there is a jetty with appliances for the use of small steamers and craft trading with Stewart Island and along the coast, the goods being handled within the town boundaries.

The Bluff Harbour, which is connected by rail with Invercargill, does a very large shipping business, accommodating steamers of the largest tonnage engaged in the frozen-meat and dairy export trade. Considerable additions have been made to the wharfage accommodation during the past year, and as an indication of the importance of the port it may be stated that the combined net tonnage of 408,756 has been entered inwards during the year, while for depth of water available one of the frozen-meat steamers, loaded up and drawing 27 ft. 5 in., passed out with ease. The port is well-known as being the first and last port of call for steamers trading with Victoria and Tasmania.

Next in size to Invercargill is the inland Town of Gore, situated on the Mataura River, and at the junction of the Main Trunk Railway with the Waimea Plains Branch. Owing to this fact, and to the fertility of the land in the neighbourhood, Gore is rapidly growing in size and importance.

Riverton is a pretty little town, about twenty-five miles from Invercargill, with which it is connected by rail, which runs through to Orepuki; it is situated on the estuary of Aparima, or Jacob's River. Riverton is the oldest settlement in Southland, and was a great resort for whalers in former years. The harbour is available for and used by coasting-vessels, but the principal carrying-trade is done by rail. There are several sawmills in the neighbourhood, this industry being largely carried on near the many timbered localities in the district.

Otautau, on the banks of the stream bearing the same name, is the county town of Wallace. It is the distributing centre of all that large area of agricultural and pastoral country lying between the Longwood range and the Waiau River, and northwards to the Mararoa River. It has direct communication by rail with Invercargill, Nightcaps, and Orepuki. In Otautau large grain stores are seen, flour-mills, and a dairy factory, while in the vicinity timber and flax mills are met with. The most direct inland communication with Lakes Manapouri and Te Anau is by road passing through the town and onwards.

The Village of Nightcaps is reached by a short line of railway from Thornbury, on the Invercargill–Riverton line. A large colliery exists here. (See Industrial, Coal, &c., *ante*.)

The Town of Winton is on the Invercargill–Kingston Railway, about twenty miles distant from Invercargill, and is the centre of a good farming, sawmilling, and coal-mining district. A short line of railway has been opened from here to Hedgehope, a locality lying some fifteen miles in a westerly direction.

Lumsden is the junction of the Kingston, Invercargill, and Waimea Plains lines. Coaches starting from here take passengers and mails to Lakes Manapouri and Te Anau and the surrounding country.

East of Invercargill are Edendale and Wyndham, both with railway connection, and surrounded by rich agricultural country reaching to Fortrose, with good roads. Fortrose is situated on the estuary of Mataura River, which can be entered by coasting steamers. This place is surrounded by exceedingly fertile agricultural country, as before mentioned.

Eastward of Fortrose and about midway between that place and Catlin's River is Waikawa, a newly-settled township with a harbour for coasters, and a large area of surveyed Crown land around, with good timber, available for settlement. Steamers trading with Dunedin and Invercargill call here and at Fortrose at regular intervals. A good export of timber occurs at Waikawa.

Crown Lands for Disposal.

The total area of surveyed lands remaining open to selection as on the 31st March, 1903, was 73,646 acres, comprising the following lands:—

	A.	R.	P.
Town and suburban	866	3	25
Village-homestead settlements	986	1	18
Rural	62,171	0	26
Rural, lease in perpetuity only	1,595	3	19
Lands for settlement, L.I.P. and S.G.R. ...	8,025	2	34
	73,646	0	2
Unsurveyed pastoral runs	1,153,871	0	0
Gross total...	1,227,517	0	2

During the current year it is proposed to open to selection about 9,500 acres in the Waiau and Longwood Districts, the survey of which is now nearly completed, and about 2,000 acres in the Alton and Lillburn Survey Districts. If the proposed withdrawal of land from State forest reservation be approved, a considerable area will be placed in the market. On Stewart Island, if the land be found suitable for settlement after careful examination, a block of a few thousand acres may be opened. The whole of these lands are forest-clad.

APPENDIX

PRINCIPAL EVENTS.

DATES OF SOME OF THE PRINCIPAL EVENTS IN THE HISTORY OF NEW ZEALAND.

Dec. 13, 1642.—Discovery of New Zealand by Abel Jansen Tasman.

Oct. 8, 1769.—Captain Cook landed at Poverty Bay on his first visit.

June 30, 1788.—Macaulay and Curtis Islands, of the Kermadec Group, discovered by Captain Sever, of H.M. transport "Lady Penrhyn."

Nov. 29, 1790.—Chatham Islands discovered by Lieutenant Broughton, in H.M.S. "Chatham."

Nov. 17, 1793.—Captain d'Entrecasteaux, with the "La Recherche" and "L'Espérance," discovered Raoul or Sunday Island. (The latter name was given by Captain Raven, of the transport "Britannia," who visited the island 6th Nov., 1796.)

Nov., 1793.—Lieutenant-Governor King's (of Norfolk Island) visit to Doubtless Bay.

1795.—The ship "Endeavour," Captain Bampton, sunk at Facile Harbour, Dusky Sound.

1800.—Antipodes Island discovered by Captain Pendleton.

1806.—Auckland Isles discovered by Captain Briscow, ship "Ocean," one of Enderby's whalers.

1806.—Ship "Venus" visited East Coast of New Zealand. She was taken by convicts at Port Dalrymple, Tasmania. Their visits gave rise to the Nga-Puhi southern expedition.

1807.—Defeat of Hongi and Nga-Puhi tribe at Moremonui, 10 miles south of Maunganui Bluff, Kaipara.

1809.—The taking and burning of the transport "Boyd" at Whangaroa.

1810.—Campbell Island discovered by Captain F. Haselburg, of brig "Perseverance."

1814.—First arrival of the Rev. Mr. Marsden at Bay of Islands, and introduction of Christianity. Horses, oxen, sheep, and poultry first brought to the colony.

Aug., 1815.—Attempted capture of the "Trial" and "Brothers" at Kennedy Bay.

1818.—Hongi's and Te Morenga's great expedition to East Cape.

1819-20.—Patuone, Nene, and Te Rauparaha's raid on Taranaki and Port Nicholson.

1820.—Hongi visited England; returned to New Zealand July, 1821.

1820.—H.M. store-ship "Coromandel" visited Coromandel.

1820.—Rev. S. Marsden travelled from Wai-te-mata *viâ* Kaipara to the Bay of Islands—the first white man to do so.

Aug., 1820.—The "Prince Regent" entered Auckland Harbour—the first vessel to do so.

Nov., 1821.—Fall of Mauinaina Pa, Auckland Isthmus, to Hongi.

Nov., 1821.—Ngati-Toa migration from Kawhia to Otaki under Te Rauparaha.

Dec., 1821.—Fall of Te Totara Pa, Thames, to Hongi.

May, 1822.—Fall of Matakitaki Pa, Waikato, to Hongi.

May, 1823.—Fall of Mokoia Pa, Rotorua Lake, to Hongi.

1823, 1828.—Acts passed by the Imperial Parliament extending the jurisdiction of the Courts of justice in New South Wales to all the British subjects in New Zealand.

1824.—Fall of Te Whetumatarau Pa, near East Cape, to Pomare.

1825.—First attempt at colonisation by an expedition under the command of Captain Herd, who bought two islands in the Hauraki Gulf.

Feb., 1825.—Great defeat of Ngati-Whatua at Te Ikaaranganui, Kaipara, by Hongi.

1827.—Destruction of mission-station at Whangaroa by Hongi's forces.

Feb., 1827.—Admiral (then Captain) Dumont D'Urville anchored in Auckland Harbour.

1828.—Hongi died at Whangaroa, from wounds received at Hokianga.

1828.—The "Maquarie," Captain Kent, the first vessel to enter Kawhia.

March, 1829.—Brig "Hawes" captured at Whakatane by Maoris.

1830.—Battle of Taumata-wiwi, near Cambridge.

1830.—Fall of Kaiapohia Pa, Canterbury.

March 6, 1830.—Battle of Kororareka, between two Nga-Puhi tribes.

Dec., 1830.—Death of Tama-i-hara-nui at the hands of Te Rauparaha's people. He was brought from Port Cooper by Captain Steward, brig "Elizabeth."

1831.—Tory Channel whaling-station established.

1831.—Application of thirteen chiefs for the protection of King William the Fourth.

Dec., 1831.—Pukerangiora Pa, Waitara, fell to Waikato.

Feb., 1832.—Repulse of Waikato at Nga-motu Pa, under Dicky Barrett.

1833.—Mr. Busby appointed British Resident, to live at the Bay of Islands.

1834.—Battle of Haowhenua and Pakakutu, near Otaki.

1834.—Bishop Williams's first visit to East Cape.

April 29, 1834.—"Harriet" wrecked at Cape Egmont.

Oct. 1, 1834.—H.M.S. "Alligator" shelled and took Waimate Pa, near Opunake. First occasion of H.M. troops being employed in New Zealand.

1835.—Declaration of independence of the whole of New Zealand as one nation, with the title of "The United Tribes of New Zealand."

Nov. and Dec., 1835.—Ngati-Awa tribes migrated to and conquered the Chatham Islands.

March 28, 1836.—Maketu Pa, Bay of Plenty, fell to Waikato.

May 9, 1836.—Te Tumu Pa, Bay of Plenty, fell to Te Arawa.

Aug. 5, 1836.—Battle at Matai-puku, Rotorua—Waikato beat Te Arawa.

Oct., 1836.—Siege of Toka-a-kuku, Te Kaha, Bay of Plenty.

1838.—The Roman Catholic Bishop Pompallier, with several priests, arrived at Hokianga.

Sept. 1, 1838.—H.M.S. "Pelorus" discovers Pelorus Sound.

April, 1839.—Taking of the French whaler "Jean Bart" at Chatham Islands by Maoris.

May 12, 1839.—Departure of the preliminary expedition of the New Zealand Company from England.

June, 1839.—Issue of Letters Patent authorising the Governor of New South Wales to include within the limits of that colony any territory that might be acquired in sovereignty by Her Majesty in New Zealand.

Sept. 16, 1839.—First body of New Zealand Company's emigrants sailed from Gravesend.

Sept. 20, 1839.—Arrival in Port Nicholson of the preliminary expedition of the New Zealand Company under Colonel Wakefield.

Oct. 16, 1839.—Battle of Te Kuititanga, Otaki.

Jan. 20, 1840.—First steamer arrived in New Zealand.

Jan. 22, 1840.—Arrival of first body of immigrants at Port Nicholson.

Jan. 29, 1840.—Captain Hobson, R.N., arrived at the Bay of Islands. On the following day (Jan. 30) he hoisted the Union flag, and read the commission, under the Great Seal of the United Kingdom, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the Islands of New Zealand; also his own commission as Lieutenant-Governor over territory that might be acquired in sovereignty.

Feb. 5, 1840.—Treaty of Waitangi signed.

May 21, 1840.—Date of Proclamations of sovereignty over the Islands of New Zealand.

June 17, 1840.—The Queen's sovereignty over the Middle Island formally proclaimed at Cloudy Bay, by Major Bunbury, H.M. 80th Regiment, and Captain Nias, R.N.

Aug. 11, 1840.—The British flag hoisted at Akaroa by Captain Stanley, R.N., and British authority established. The French frigate "L'Aube" arrived there on the 13th August, and the vessel "Comte de Paris," with fifty-seven immigrants, on the 16th August, in order to establish a French colony.

Sept. 18, 1840.—The British flag hoisted at Auckland. The Lieutenant-Governor's residence established there.

1840.—Formation of Wanganui settlement under the name of "Petre."

Feb. 12, 1841.—Issue of charter of incorporation to the New Zealand Company.

Mar. 31, 1841.—Arrival of first New Plymouth settlers.

May 3, 1841.—New Zealand proclaimed to be independent of New South Wales.

Oct., 1841.—Selection of site for settlement at Nelson.

Feb. 1, 1842.—Settlement founded at Nelson.

May 29, 1842.—Arrival of Bishop Selwyn in the colony.

Sept. 10, 1842.—Death of Governor Hobson. Lieutenant Shortland, R.N., Colonial Secretary, became Acting-Governor until the arrival of Captain Fitzroy.

June, 1843.—Affray with Natives at the Wairau, and massacre by Rangihaeata of Captain Wakefield, R.N., agent at Nelson of the New Zealand Company, and others, who had surrendered.

Dec. 1, 1843.—Arrival of Captain Fitzroy, R.N., as Governor.

July 8, 1844.—The Royal flagstaff at Kororareka cut down by Heke.

March 10, 1845.—Attack on and destruction of Town of Kororareka by Heke.

Oct. 1, 1845.—Receipt of despatch notifying recall of Governor Fitzroy.

Nov. 14, 1845.—Arrival of Captain Grey, as Lieutenant-Governor of the colony, from South Australia.

Jan. 11, 1846.—Capture of pa at Ruapekapeka, Bay of Islands, and termination of Heke's war.

Mar. 3, 1846.—Commencement of Native hostilities in the Hutt Valley, near Wellington.

May 16, 1846.—Attack by Natives on a military outpost in the Hutt Valley.

July 23, 1846.—Capture of Te Rauparaha at Porirua, near Wellington. He was detained for a year as a prisoner on board a ship of war.

Aug. 28, 1846.—The New Zealand Government Act passed by the Imperial Parliament, under which a charter was issued dividing the colony into two provinces, and granting representative institutions.

May 19, 1847.—Attack by Natives on settlement of Wanganui.

Jan. 1, 1848.—Captain Grey sworn in as Governor-in-Chief over the Islands of New Zealand, also as Governor of the Province of New Ulster and Governor of the Province of New Munster.

Jan. 3, 1848.—Major-General Pitt appointed by Governor Grey to be Lieutenant-Governor of the Province of New Ulster.

Jan. 28, 1848.—Assumption by Lieutenant-Governor E. J. Eyre, at Wellington, of the administration of the Government of the Province of New Munster.

Feb. 21, 1848.—Peace ratified at Wanganui.

Mar. 7, 1848.—Suspension by Imperial statute of that part of the New Zealand Government Act which had conferred representative institutions.

Mar., 1848.—Otago founded by a Scotch company under the auspices of the Free Church of Scotland.

Oct., 1848.—Severe earthquake at Wellington.

July, 1850.—Surrender of the New Zealand Company's charter, all its interests in the colony reverting to the Imperial Government.

Dec., 1850.—Canterbury founded by the Canterbury Association in connection with the Church of England.

Jan. 8, 1851.—Death of Major-General Pitt, Lieutenant-Governor of the Province of New Ulster.

April 14, 1851.—Lieutenant-Colonel Wynyard appointed Lieutenant-Governor of the Province of New Ulster.

1852.—Discovery of gold at Coromandel by Mr. Charles Ring.

June 30, 1852.—The Constitution Act passed by the Imperial Parliament, granting representative institutions to the colony, and subdividing it into six provinces.

Jan., 1853.—Promulgation of the Constitution Act.

Mar. 7, 1853.—Assumption by Sir George Grey, K.C.B., of the duties of Governor of the colony, in terms of the appointment after the passing of the New Zealand Constitution Act, and cessation of the duties of the Lieutenant-Governors of New Ulster and New Munster.

Dec. 31, 1853.—Departure of Governor Sir George Grey.

Jan. 3, 1854.—Lieutenant-Colonel Wynyard assumed the administration of the Government.

May 27, 1854.—Opening at Auckland of the first session of the General Assembly by Lieutenant-Colonel Wynyard, Administrator of the Government.

Jan., 1855.—Very severe earthquake on each side of Cook Strait.

Sept. 6, 1855.—Arrival of Governor Colonel T. Gore Browne, C.B.

Nov. 12, 1855.—First members elected to House of Representatives under system of Responsible Government.

Aug. 8, 1855.—General Assembly opened.

Sept. 15, 1855.—General Assembly prorogued.

May 7, 1856.—Appointment of the first Ministry under the system of Responsible Government, under Mr. Sewell, Colonial Secretary.

May 14, 1856.—Defeat of Mr. Sewell's Ministry.

May 20, 1856.—Appointment of a Ministry under presidency of Mr. W. Fox, as Attorney-General.

May 28, 1856.—Defeat of Mr. Fox's Ministry, by a majority of one, on a direct vote of want of confidence.

June 2, 1856.—Appointment of a Ministry under the presidency of Mr. E. W. Stafford.

1857.—First payable goldfield in the colony opened at Collingwood, in the Nelson Province.

Aug. 21, 1858.—New Provinces Act passed.

Nov. 1, 1858.—Establishment of the Province of Hawke's Bay.

Dec. 22, 1858.—The Austrian exploring frigate "Novara" arrived in Auckland Harbour. Dr. Ferdinand von Hochstetter, at the request of the New Zealand Government, was commissioned to make geological surveys of the greater part of Auckland and Nelson Provinces.

March, 1859.—Te Teira offered land at Waitara for sale to the Government.

Nov. 1, 1859.—Establishment of the Province of Marlborough.

Mar., 1860.—Commencement of hostilities against Wiremu Kingi te Rangitake at Waitara.

Mar. 18, 1860.—Capture of Maori pa at Waitara.

Mar. 28, 1860.—Engagement at Waireka.

June 27, 1860.—Engagement of Puketakauere at Waitara.

Nov. 6, 1860.—Defeat at Mahoetahi, with heavy loss, of a force of Waikato Natives, who had crossed the Waitara River to join Wiremu Kingi.

Dec. 31, 1860.—Capture of the Matarikoriko Pa, and defeat of a large body of Waikato Natives.

Jan. 23, 1861.—The Natives made a determined attack on the redoubt at Huirangi occupied by Imperial troops, and were repulsed with heavy loss.

April 1, 1861.—Establishment of Province of Southland.

May 21, 1861.—A truce agreed to.

May, 1861.—Discovery of gold at Gabriel's Gully, Otago.

July 5, 1861.—Defeat of Mr. Stafford's Ministry, by a majority of one, on a vote of want of confidence.

July 12, 1861.—Appointment of a Ministry under the premiership of Mr. Fox.

July 29, 1861.—Incorporation of the Bank of New Zealand.

Sept. 26, 1861.—Arrival of Sir George Grey, K.C.B., at Auckland, from the Cape Colony, to succeed Governor Gore Browne. Sir George Grey was sworn in as Governor on the 3rd October.

Oct. 2, 1861.—Departure of Governor Gore Browne.

June 28, 1862.—Coromandel proclaimed a goldfield.

June 29, 1862.—Wreck of s.s. "White Swan" on East Coast (with loss of many public records, in transit from Auckland).

July 28, 1862.—Defeat of Mr. Fox's Ministry by the casting-vote of the Speaker, on a proposed resolution in favour of placing the ordinary conduct of Native affairs under the administration of the Responsible Ministers.

Aug. 6, 1862.—Appointment of a Ministry under the leadership of Mr. Alfred Domett.

Feb. 7, 1863.—Wreck of H.M.S. "Orpheus" on Manukau Bar; 181 lives lost.

Feb. 26, 1863.—Definite relinquishment by the Imperial Government of control over administration of Native affairs.

May 4, 1863.—Treacherous assault near Tataraimaka by Natives on a military escort. Murder of Lieutenant Tragett, Dr. Hope, and five soldiers of the 57th Regiment.

June 4, 1863.—Defeat of Natives at Katikara, by a force under Lieut.-General Cameron.

July 17, 1863.—Action at Koheroa, in the Auckland Province. Commencement of the Waikato War.

Oct. 27, 1863.—Resignation of the Domett Ministry, in consequence of difficulties experienced in connection with arrangements for finding a fitting representative of the Government in the Legislative Council.

Oct. 30, 1863.—Appointment of the Ministry formed by Mr. Fox, under the premiership of Mr. F. Whitaker.

Nov., 1863.—Acceptance by the General Assembly of colonial responsibility in Native affairs.

Nov. 20, 1863.—Battle of Rangiriri. Defeat of Natives and unconditional surrender of 183.

Dec. 1, 1863.—The first railway in New Zealand opened for traffic by W. S. Moorhouse, Superintendent of Canterbury. The line was from Christchurch to Ferrymead Junction.

Dec. 3, 1863.—The New Zealand Settlements Act passed, giving the Governor power to confiscate the lands of insurgent Natives.

Dec. 8, 1863.—Occupation of Ngaruawahia. The British flag hoisted on the Maori king's flagstaff.

Feb. 11, 1864.—Engagement with Natives on Mangapiko River. Major (then Captain) Heaphy, of the New Zealand Forces, won the Victoria Cross for distinguished bravery on this occasion.

Feb. 22, 1864.—Defeat of Natives at Rangiaohia.

April 2, 1864.—Attack on and capture of pa at Orakau, Waikato.

April 21, 1864.—Engagement near Maketu, Bay of Plenty. Tribes of the Rawhiti defeated by Arawa Natives, under Captain McDonnell.

April 29, 1864.—Assault on Gate Pa, Tauranga, Bay of Plenty, and repulse of large British force by the Maoris. The pa was abandoned by the Natives during the following night.

April 30, 1864.—Repulse of attack by rebel Hauhau Natives on redoubt at Sentry Hill, Taranaki.

May 14, 1864.—Battle of Moutoa, an island in the Wanganui River, between friendly and rebel Hauhau Natives. Complete defeat of rebels.

June 21, 1864.—Engagement at Te Ranga, near Tauranga, by Lieut.-Colonel Greer, 68th Regiment. Severe defeat of the Natives.

1864.—Discovery of gold on the west coast of the Middle Island.

Sept. 10, 1864.—Escape of Maori prisoners from Kawau.

Oct. 3, 1864.—Wellington chosen as the seat of Government.

Nov. 24, 1864.—Appointment of a Ministry under the premiership of Mr. F. A. Weld, the Whitaker-Fox Ministry having resigned during the recess.

Dec. 17, 1864.—Confiscation of Native lands in Waikato by Sir George Grey.

Feb., 1865.—Removal of the seat of Government to Wellington.

March 2, 1865.—Barbarous murder of the Rev. Mr. Volkner, a Church of England missionary, at Opotiki, by Hauhau fanatics, under Kereopa.

June 8, 1865.—Submission of the Maori Chief Wiremu Tamihana te Waharoa (William Thompson).

June 17, 1865.—Murder of Mr. Fulloon, a Government officer, and his companions, at Whakatane, by Hauhau fanatics.

July 22, 1865.—Capture of the Wereroa Pa, near Wanganui.

Aug. 2, 1865.—Assault and capture of the Pa Kairomiromi, at Waiapu, by Colonial Forces under Captain Fraser, and Native Contingent under the chief Te Mokena. Eighty-seven rebels killed.

Sept. 2, 1865.—Proclamation of peace issued by Governor Sir George Grey, announcing that the war, which commenced at Oakura, was at an end.

Sept. 30, 1865.—Murder by Hauhaus, at Kakaramea, of Mr. Broughton, when sent as friendly messenger to them by Brigadier-General Waddy.

Oct. 12, 1865.—Resignation of Mr. Weld's Ministry, on account of a resolution adverse to the Government policy, having been defeated only by the casting-vote of the Speaker.

Oct. 16, 1865.—Appointment of a Ministry under the premiership of Mr. E. W. Stafford.

Dec. 25, 1865.—Defeat of rebel Natives at Wairoa, Hawke's Bay, by Colonial Forces and Native Contingent.

Jan. 4, 1866.—Defeat of Natives at Okotuku Pa, on the west coast of the North Island, by force under Major-General Chute.

Jan. 7, 1866.—Assault on and capture of Putahi Pa, by force under Major-General Chute.

Jan. 13, 1866.—Assault on and capture of Otapawa Pa, by force under Major-General Chute.

Jan. 17, 1866, to Jan. 25, 1866.—Period of Major-General Chute's march through the bush to New Plymouth.

Jan., 1866.—Escape of a large number of Native prisoners from the hulk at Wellington; many were drowned in trying to swim ashore.

March 29, 1866.—Submission of the rebel chiefs Te Heuheu and Herekiekie, of Taupo district.

Mar., 1866.—A detachment of Maori prisoners sent to the Chatham Islands.

June 15, 1866.—Commencement of Panama steam mail-service.

Aug. 26, 1866.—The Cook Strait submarine telegraph cable laid.

Oct. 2, 1866.—Engagement with rebel Natives at Pungarehu, West Coast, by Colonial Forces, under Major McDonnell.

Oct. 8, 1866.—First Act passed to impose stamp duties.

Oct. 12, 1866.—Defeats of rebel Natives at Omaranui and at Petane, Hawke's Bay, by Colonial Forces.

Oct. 10, 1867.—An Act passed to establish an institute for the promotion of science and art in the colony.

Oct. 10, 1867.—An Act passed for the division of the colony into four Maori electorates, and the admission of four Maori members to the House of Representatives.

Jan., 1868.—Establishment of the County of Westland.

Feb. 5, 1868.—Arrival of Governor Sir George F. Bowen, G.C.M.G.

July 4, 1868.—Seizure by Maori prisoners, under the leadership of Te Kooti, of the schooner "Rifleman," and their escape from the Chatham Islands.

July 12, 1868.—Night attack by Natives on redoubt at Turuturu Mokai. Sub-Inspector Ross and seven Europeans killed. Natives driven off by the arrival of a force under Major Von Tempsky.

Aug. 8, 1868.—Pursuit by Lieut.-Colonel Whitmore of escaped Chatham Island prisoners, and indecisive engagement in the gorge of the Ruake Ture.

Aug. 21, 1868.—Attack on Ngutu-o-te-Manu by force under Lieut.-Colonel McDonnell. Defeat of Natives; four Europeans killed and eight wounded.

Sept. 7, 1868.—Engagement in bush at Ngutu-o-te-Manu. Major Von Tempsky, Captains Buck and Palmer, Lieutenants Hunter and Hastings, and fourteen men killed.

Oct. 19, 1868.—Bishop Selwyn left New Zealand.

Nov. 7, 1868.—Attack on Moturoa. Repulse of Colonial Forces, with severe loss.

Nov. 10, 1868.—Massacre of thirty-two Europeans at Poverty Bay by Te Kooti's band of Natives, who had escaped from the Chatham Islands.

Nov. 24, 1868, Dec. 3, 1868, Dec. 5, 1868.—Engagements between friendly Natives and rebels under Te Kooti, at Patutahi, Poverty Bay district.

Jan. 5, 1869.—Assault on and capture of Ngatapa Pa, Poverty Bay district, after a siege of six days, by the Colonial Forces of Europeans and friendly Natives under Colonel Whitmore and Major Ropata. Dispersion and pursuit of Te Kooti's band. More than 136 rebel Natives were killed.

Feb. 13, 1869.—Treacherous murder of the Rev. John Whitely and seven other Europeans at the White Cliffs, Taranaki.

Feb. 18, 1869.—Attack by rebel Natives on a foraging-party at Karaka Flat; one sergeant and six men killed.

Mar. 3, 1869.—Termination of Panama mail-service.

Mar. 13, 1869.—Attack on and defeat of Titokowaru's force at Otauto.

April 10, 1869.—Native pa at Mohaka taken by Te Kooti, who killed forty friendly Natives and several Europeans in the neighbourhood.

April 12, 1869.—First arrival of H.R.H. the Duke of Edinburgh in Wellington, in H.M.S. "Galatea."

May 6, 1869.—Surprise and capture of Ahikereru and Oamaru Teangi Pas, Waiwera country. Defeat of Te Kooti.

June 13, 1869.—Surrender to Major Noake and Mr. Booth, R.M., of the chief Tairua, with 122 men, women, and children of the Pakakohe Tribe, near Wanganui.

June 24, 1869.—Defeat of Mr. Stafford's Ministry on a want-of-confidence motion.

June 28, 1869.—Appointment of a Ministry under the premiership of Mr. W. Fox.

Sept. 3, 1869.—An Act passed providing Government life insurance and annuities.

Oct., 1869.—Seventy-four prisoners from the bands of Te Kooti and Titokowaru sentenced to death, after trial, for treason. The sentences of seventy-three were commuted to penal servitude for various terms.

Oct. 4, 1869.—Pourere Pa stormed and taken by Lieut.-Colonel McDonnell, with a mixed force of Europeans and Natives.

Jan., 1870.—Three hundred friendly Natives under Topia, and three hundred under Major Keepa (known as Kemp), started up the Wanganui River in pursuit of Te Kooti, who retreated into the Urewera country.

Jan. 25, 1870.—Capture of Tapapa Pa, occupied by Te Kooti.

Feb. 24, 1870.—The last detachment of the Imperial troops left the colony.

Mar. 25, 1870.—Major Keepa, with Native force, captured the position held by Te Kooti at Maraetahi, in Urewera country; nineteen rebels killed and seventy-three of Te Kooti's men taken prisoners. Te Kooti escaped with twenty followers.

Mar. 26, 1870.—Commencement of San Francisco mail-service.

June 28, 1870.—Enunciation in the House of Representatives of the public-works policy by the Colonial Treasurer, Mr. Vogel.

July, 1870.—Thirty prisoners of Te Kooti's band sentenced to death. The sentences were commuted to penal servitude.

Aug. 27, 1870.—Arrival in Wellington of H.R.H. the Duke of Edinburgh in H.M.S. "Galatea." Second visit.

Sept. 12, 1870.—An Act passed to establish the New Zealand University.

Sept. 12, 1870.—The Land Transfer Act passed, to simplify the title to land and dealings with real estates.

Oct. 6, 1870.—Southland Province reunited with Otago.

Dec. 5, 1870.—Honiani te Puni, the chief of the Ngatiawas, a staunch friend of the Europeans, died at Patone, near Wellington, aged ninety years.

Mar., 1871.—Commencement of railway-construction under the public-works policy.

Aug. 4, 1871.—Death of Tamati Waka Nene, the great Ngapuhi chief and friend of the Europeans.

Nov., 1871.—Capture of the notorious rebel Kereopa, the murderer of the Rev. Mr. Volkner, by the Ngatiporous.

Jan. 5, 1872.—Execution of Kereopa at Napier.

Jan., 1872.—Remission of sentences on fifty-eight Native prisoners then undergoing imprisonment for rebellion.

Feb. 22, 1872.—Visit of William King, the Maori chief of Waitara, to New Plymouth, and resumption of amicable relations with the Europeans.

May 9, 1872.—A general thanksgiving-day for the recovery of H.R.H. the Prince of Wales.

Sept. 6, 1872.—Defeat and resignation of Mr. Fox's Ministry.

Sept. 10, 1872.—Appointment of a Ministry under the premiership of the Hon. E. W. Stafford.

Oct. 4, 1872.—Defeat of the Stafford Ministry on a vote of want of confidence moved by Mr. Vogel.

Oct. 11, 1872.—Appointment of a Ministry under the premiership of the Hon. G. M. Waterhouse, M.L.C.

Oct. 11, 1872.—First appointment of Maori chiefs (two) to be members of the Legislative Council.

Oct. 25, 1872.—The Public Trust Office Act passed.

Jan., 1873.—Establishment of the New Zealand Shipping Company.

Mar. 3, 1873.—The Hon. W. Fox appointed Premier on the resignation of that office by the Hon. G. M. Waterhouse, the other members of the Ministry being confirmed in their offices.

Mar. 19, 1873.—Departure of Governor Sir G. F. Bowen, G.C.M.G.

Mar. 21, 1873.—Assumption of the Government by Sir G. A. Arney, Chief Justice, as Administrator.

April 8, 1873.—Resignation of the premiership by the Hon. W. Fox, on the return of the Hon. J. Vogel, C.M.G., from Australia. Appointment of Mr. Vogel as Premier, the other Ministers being confirmed in their offices.

June 14, 1873.—Arrival of Governor Sir J. Fergusson, P.C.

Aug. 22, 1874.—The Imprisonment for Debt Abolition Act passed.

Nov. 27, 1874.—Sir James Fergusson left New Zealand.

Dec. 3, 1874.—Arrival of Governor the Marquis of Normanby, P.C.

1874.—31,774 immigrants were introduced this year under the immigration and public-works policy.

Jan. 3, 1875.—Visit of Sir Donald McLean to the Maori king; resumption of amicable relations.

July 6, 1875.—Resignation of the Ministry, in consequence of the absence of Sir J. Vogel, K.C.M.G., in England, and his being unable to attend the session of Parliament. Reconstitution thereof, under the premiership of the Hon. Dr. Pollen, M.L.C.

July, 1875.—Establishment of the Union Steam Shipping Company of New Zealand.

1875.—18,324 immigrants were introduced this year under the immigration and public-works policy.

Oct. 12, 1875.—The Abolition of Provinces Act passed.

Feb. 15, 1876.—Resignation of the Hon. Dr. Pollen's Ministry, and reconstitution under the premiership of Sir J. Vogel, K.C.M.G.

Feb. 18, 1876.—Completion of the work of laying the telegraph cable between New Zealand and New South Wales.

June, 1876.—Death of Dr. Isaac Earl Featherston, while acting as Agent-General for the colony in England. He was the first to hold that office, and had previously been Superintendent of the Province of Wellington from the time of the first establishment of provincial representative institutions.

Sept. 1, 1876.—Resignation of Sir J. Vogel's Ministry in view of the appointment of Sir J. Vogel as Agent-General. Formation of a Ministry under the premiership of Major Atkinson.

Sept. 13, 1876.—Resignation of Major Atkinson's Ministry in consequence of doubts being entertained as to the constitutional position thereof. Reconstruction of the Ministry under the premiership of Major Atkinson.

Nov. 1, 1876.—"The Abolition of Provinces Act, 1875," came into full operation. Complete abolition of provincial institutions. The colony subdivided into counties and municipal boroughs.

Oct. 8, 1877.—Defeat of the Atkinson Ministry on a vote of want of confidence moved by Mr. Larnach.

Oct. 15, 1877.—Appointment of a Ministry under the premiership of Sir George Grey, K.C.B.

Nov. 29, 1877.—The Education Act, providing for the free and compulsory education of children, passed.

April 11, 1878.—Bishop Selwyn died, in England.

Oct. 29, 1878.—Sir George Grey's first land-tax passed.

Feb. 29, 1879.—Departure of Governor the Marquis of Normanby, P.C.

Mar., 1879.—Removal of surveyors from the Waimate Plains by Natives acting under Te Whiti's orders.

Mar. 27, 1879.—Arrival of Governor Sir Hercules G. R. Robinson, G.C.M.G.

May 25, 1879.—The Natives from Parihaka, by order of Te Whiti, began ploughing up lands occupied by Europeans.

June, 1879.—Arrest and imprisonment of 180 of these Natives for causing disturbances.

July 29, 1879.—Defeat of the Grey Ministry on an amendment to the Address in Reply, moved by Sir William Fox, followed by a dissolution of Parliament.

Oct. 3, 1879.—Defeat and subsequent resignation of Sir George Grey's Ministry.

Oct. 8, 1879.—Appointment of a Ministry under the premiership of the Hon. John Hall.

Dec. 19, 1879.—An Act passed to assess property for the purpose of taxation.

Dec. 19, 1879.—The Triennial Parliament Act passed.

Dec. 19, 1879.—An Act passed to qualify every resident male of twenty-one years of age and upwards to vote.

June, 1880.—First portion of the Parihaka Maori prisoners released by the Government.

July 9, 1880.—Bounty Island taken possession of by Captain George Palmer, H.M.S. "Rosario."

Sept. 8, 1880.—Departure of Governor Sir Hercules G. R. Robinson, G.C.M.G.

Oct. 1880.—Release of the last portion of the Parihaka Maori prisoners.

Oct. 26, 1880.—Sir Francis Dillon Bell appointed Agent-General.

Nov. 29, 1880.—Arrival of Governor Sir A. H. Gordon, G.C.M.G.

April 29, 1881.—"Tararua," steamer, wrecked; 130 lives lost.

June 26, 1881.—Severe earthquakes in Wellington.

Nov. 5, 1881.—March of force of Constabulary and Volunteers on Parihaka, and arrest of Te Whiti and Tohu, without bloodshed.

Feb. 15, 1882.—First shipment of frozen meat made from Port Chalmers. (See Year-book, 1893, p. 192.)

April 21, 1882.—Resignation (during the recess) of the Hon. J. Hall's Ministry, and its reconstruction under the premiership of the Hon. F. Whitaker, M.L.C.

June 23, 1882.—Departure of Governor Sir A. H. Gordon.

June 24, 1882.—Assumption of the Government by Sir J. Prendergast, Chief Justice.

Jan. 20, 1883.—Arrival of Governor Sir W. F. D. Jervois, G.C.M.G., C.B.

Jan. 26, 1883.—A direct line of steam-communication between England and New Zealand inaugurated by the New Zealand Shipping Company.

Feb. 13, 1883.—Proclamation of amnesty to Maori political offenders.

Feb. 19, 1883.—Liberation of Te Whiti and Tohu.

Sept. 25, 1883.—Resignation of the office of Premier and his seat in the Ministry by the Hon. F. Whitaker, and the appointment of the Hon. Major H. A. Atkinson to be Premier, the members of Mr. Whitaker's Ministry being confirmed in their offices.

June 11, 1884.—Defeat of Major Atkinson's Government.

June 27, 1884.—Dissolution of the General Assembly.

Aug. 16, 1884.—Resignation of Major Atkinson's Ministry in consequence of the result of the general election. Formation of a Ministry under the premiership of Mr. Robert Stout.

Aug. 20, 1884.—Defeat of Mr. Stout's Ministry by an amendment, expressive of want of confidence, to the Address in Reply being carried.

Aug. 28, 1884.—Appointment of a Ministry under the premiership of Major Atkinson.

Aug. 29, 1884.—Defeat of Major Atkinson's Ministry on a vote of want of confidence.

Sept. 3, 1884.—Appointment of a Ministry under the premiership of Mr. Robert Stout.

Nov. 8, 1884.—An Act passed to enable certain loans of the New Zealand Government to be converted into inscribed stock and the accrued sinking funds released.

Aug. 1, 1885.—The New Zealand Industrial Exhibition opened at Wellington.

June 10, 1886.—Volcanic eruptions at Tarawera, and destruction of the famed Pink and White Terraces; 101 lives lost.

May 28, 1887.—Defeat of Sir Robert Stout's Ministry.

July 15, 1887.—Dissolution of the General Assembly, after prorogation, on the 10th June.

July 21, 1887.—A Proclamation issued declaring the Kermadec Islands to be annexed to and form part of the Colony of New Zealand.

Aug. 17, 1887.—Kermadec Group annexed to New Zealand. Flag hoisted and proclamation read at Sunday Island.

Oct. 8, 1887.—Appointment of a Ministry under the premiership of Major H. A. Atkinson, Sir Robert Stout's Ministry having resigned in consequence of the result of the election.

Dec. 19, 1887.—An Act passed to reduce the number of members of the House of Representatives, after the expiration of the General Assembly then sitting, to seventy-four, including four Maori representatives.

Dec. 23, 1887.—The Australian Naval Defence Act, being an Act to provide for the establishment of an additional naval force on the Australian station, at the joint charge of the Imperial and the several Colonial Governments, was passed by the New Zealand Legislature.

Oct. 27, 1888.—Formal Proclamation of British Protectorate of Cook group of islands, by Captain Bourke, R.N., of H.M.S. "Hyacinth."

Mar. 22, 1889.—Departure of Governor Sir W. F. D. Jervois, G.C.M.G., C.B., from the colony.

Mar. 23, 1889.—Assumption of the Government by Sir James Prendergast.

May 2, 1889.—Arrival of the Earl of Onslow, G.C.M.G.

Sept. 2, 1889.—Electors prohibited by statute from voting in respect of more than one electorate at any election for the House of Representatives.

Nov. 26, 1889.—Opening of South Seas Exhibition, Dunedin.

Dec. 5, 1890.—First election of members of the House of Representatives under a practical manhood suffrage, and on the one-man-one-vote principle.

Jan. 24, 1891.—Notification by Governor of acceptation of resignation (during the recess) of the Hon. Sir H. A. Atkinson's Ministry. Appointment of a Ministry under the premiership of the Hon. John Ballance.

April 22, 1891.—Proclamation by Governor of New Zealand to inhabitants at Rarotonga of appointment of British Resident for the Protectorate of the Cook Islands.

May 25, 1891.—Adhesion of Australia to Postal Union.

Aug. 19, 1891.—Labour-laws: Passing of Employers' Liability Act 1882 Amendment Act

Aug. 29, 1891.—Labour-laws: Passing of Truck Act, to prohibit payment of wages in goods or otherwise than in money.

Sept. 8, 1891.—Passing of Land and Income Assessment Act for purposes of taxation, and repeal of property-tax.

Sept. 21, 1891.—Labour-laws: Passing of an Act for supervising and regulating of factories and workrooms. [Repealed by Act of 1894.]

Jan. 19, 1892.—Electoral districts of the colony based on population as ascertained by the results of the census of 1891 proclaimed.

Feb. 2, 1892.—Departure of Governor the Earl of Onslow.

Feb. 25, 1892.—Assumption of the Government by Sir James Prendergast, Chief Justice.

June 7, 1892.—Arrival of Governor the Earl of Glasgow, G.C.M.G.

June 28, 1892.—Death of Sir H. A. Atkinson, K.C.M.G., Speaker of the Legislative Council, and previously four times Premier.

Oct. 1, 1892.—Labour-laws: Passing of Contractors' and Workmen's Lien Act.

Oct. 8, 1892.—Passing of Dairy Industry Act. [Repealed by Act of 1894.]

Oct. 11, 1892.—Passing of first Land-tax and Income-tax Act on the basis of the Assessment Act of previous year.

Oct. 11, 1892.—"Land Act, 1892": Lease in Perpetuity without revaluation system introduced: occupation with right of purchase: optional method of selection: small farms associations.

Oct. 8, 1892.—"Land for Settlements Act, 1892," authorising purchase of lands from individuals for purposes of subdivision. [Repealed by Act of 1894. See *post.*]

April 19, 1893.—Cheviot Estate taken over by Government under the Land and Income Assessment Act.

April 27, 1893.—Death of Hon. John Ballance, Premier of New Zealand.

May 1, 1893.—Resignation of the Ministry in consequence of the death of the Hon. John Ballance, and appointment of a new Ministry under the premiership of the Hon. R. J. Seddon.

June 23, 1893.—Death of Sir William Fox, K.C.M.G., four times Premier of New Zealand.

Sept. 2, 1893.—Passing of Bank-note Issue Act, to make bank-notes a first charge on assets and to enable the Government to declare them to be a legal tender, &c.

Sept. 8, 1893.—The Legislative Council of New Zealand passed, by a majority of two, the Bill conferring the franchise on women.

Sept. 14, 1893.—Banks and Bankers Act Amendment Act passed, to permit of increase of capital by issue of new shares.

Sept. 19, 1893.—"The Electoral Act, 1893," extending franchise to women.

Oct. 2, 1893.—Alcoholic Liquors Sale Control Act passed: New licenses to be granted subject to the votes of the electors: reduction or abolition of licenses if desired.

Oct. 6, 1893.—Passing of "Criminal Code Act, 1893."

Oct. 6, 1893.—Labour-laws: Passing of "Workmen's Wages Act, 1893."

Oct. 6, 1893.—Native Land Purchase and Acquisition Act.

Oct. 20, 1893.—Sir James Prendergast appointed temporarily Deputy of the Governor.

Nov. 28, 1893.—A general election took place, being the first occasion on which women exercised the franchise.

Dec. 28, 1893.—Death of Right Rev. Dr. Henry John Chitty Harper, formerly Bishop of Christchurch and Primate of New Zealand.

Mar. 19, 1894.—Sir James Prendergast appointed temporarily Deputy of the Governor.

June 30, 1894.—Passing of Act to extend operation of Bank-note Issue Act, and another Act to control the transfer of bank shares.

June 30, 1894.—"Bank of New Zealand Share Guarantee Act, 1894," to guarantee special issue of shares to amount of £2,000,000, and purchase of Assets Estates Company by Assets Board. [Amended on July 20.]

July 20, 1894.—Passing of an Act to limit number of bank directors and power of shareholders to transfer their shares.

Aug. 21, 1894.—Labour-laws: Passing of Conspiracy Law Amendment.

Aug. 31, 1894.—Labour-laws: Passing of an Act to encourage the formation of industrial unions and associations, and to facilitate the settlement of industrial disputes by conciliation and arbitration.

Oct. 18, 1894.—"New Zealand Consols Act, 1894."

Oct. 18, 1894.—"Government Advances to Settlers Act, 1894," for relief of settlers burdened by high charges of interest, &c.

Oct. 18, 1894.—Passing of "Land for Settlements Act, 1894," authorising acquisition of private lands for purposes of settlement, with compulsory powers, and repealing Act of 1892; also "Lands Improvement and Native Lands Acquisition Act, 1894."

Oct. 18, 1894.—Labour-laws: Passing of "Shops and Shop-assistants Act, 1894," for limiting hours of business in shops.

Oct. 23, 1894.—Passing of "Banking Act, 1894."

Oct. 23, 1894.—Dairy Industry Act, to regulate manufacture of butter and cheese, with inspection and grading for export, and provide for purity of milk.

Oct. 28, 1894.—Wreck of s.s. "Wairarapa" at Great Barrier Island; 135 lives lost.

Mar. 29, 1895.—Death of Right Reverend Andrew Burn Suter, D.D., formerly Bishop of Nelson, and Primate of New Zealand.

May 27, 1895.—Government assumed management of the Midland Railway.

Aug. 3, 1895.—Death of C. W. Richmond, Puisne Judge of Wellington.

Aug. 20, 1895.—Trustees cemeteries authorised to provide for cremation of dead.

Sept. 4, 1895.—"Bank of New Zealand and Banking Act, 1895," providing for writing off paid-up capital with proceeds of first call on reserve liability. Also for new capital and Assets Realisation Board, &c. Also to purchase business of any other bank.

Sept. 20, 1895.—Labour-laws: Passing of an Act to regulate attachment of wages.

Sept. 20, 1895.—Labour-laws: Passing of Servants' Registry Office Act.

Sept. 20, 1895.—"Family Homes Protection Act, 1895," to secure homes for the people and to prevent them from mortgage or sale for debt.

Oct. 18, 1895.—Amended tariff passed.

Oct. 31, 1895.—Bank of New Zealand and Banking Act Amendment Act: Sale of Colonial Bank business to Bank of New Zealand.

Dec. 20, 1895.—Appointment of Sir P. A. Buckley, K.C.M.G., as a Judge of Supreme Court.

Jan. 10, 1896.—Hon. W. P. Reeves appointed Agent-General in London.

Mar. 26, 1896.—Brunner Mine explosion; sixty-seven deaths.

April 12, 1896.—General census of colony taken for Sunday night.

May 18, 1896.—Death of Sir Patrick Buckley, K.C.M.G.

July 11, 1896.—Appointment of Mr. W. B. Edwards as a Judge of the Supreme Court.

July 19, 1896.—Death of Hon. Robert Pharazyn, M.L.C.

Aug. 2, 1896.—Death of James Edward FitzGerald, C.M.G., Controller and Auditor-General.

Oct. 16, 1896.—Land for Settlements Act amended: Special provision made for disposal of highly improved lands acquired: preference given to landless people: Boards may select applicants, &c.

Oct. 17, 1896.—Alteration of franchise by abolition of non-residential or property qualification.

Oct. 17, 1896.—Government Valuation of Land Act passed.

Dec. 4, 1896.—General election of members of House of Representatives for the new districts as fixed by the Representation Commissioners on basis of Census, 1896.

Feb. 6, 1897.—Departure of the Earl of Glasgow, G.C.M.G.

Feb. 8, 1897.—Sir James Prendergast Administrator of Government.

June 22, 1897.—Diamond Jubilee of reign of Her Majesty Queen Victoria. Hon. R. J. Seddon, Premier of New Zealand, called to Privy Council, on occasion of his visit to England with contingent New Zealand Forces.

July 29, 1897.—Wreck of s.s. "Tasmania" at Mahia Peninsula, ten lives lost.

Aug. 10, 1897.—The Earl of Ranfurly assumed office as Governor.

Dec. 22, 1897.—Act to establish at Wellington the Victoria College, in connection with the New Zealand University.

July 15, 1898.—Hon. Sir Francis Dillon Bell, K.C.M.G., C.B., died.
1898.—Death of Sir George Grey, K.C.B.
1898.—Death of Bishop Selwyn, of Melanesia.
Oct. 15, 1898.—The Municipal Franchise Reform Act passed.
1898.—The Divorce Bill passed both Houses. Her Majesty's assent thereto gazetted 13th April, 1899.
Nov. 1, 1898.—An Act to provide for Old-age Pensions passed.
Feb. 10, 1899.—Rev. William Colenso died at Napier.
March 13, 1899.—Sir Julius Vogel, K.C.M.G., died.
April, 1899.—Victoria University College opened in Wellington.
May 25, 1899.—Resignation of Sir James Prendergast, Chief Justice.
June 1, 1899.—"The Divorce Act, 1898" (assented to by Her Majesty the Queen), came into operation.
June 22, 1899.—Sir Robert Stout, K.C.M.G., appointed Chief Justice.
Oct. 19, 1899.—Act passed constituting Labour Day. The second Wednesday in the month of October in each year to be a public holiday.
Oct. 21, 1899.—N.Z. Contingent (the first) consisting of 215 officers and men, left in s.s. "Waiwera" for Algoa Bay to assist the British in the Transvaal war.
Nov. 16, 1899.—General Assembly dissolved.
Dec. 6, 1899.—General Election of Members of House of Representatives.
Jan. 21, 1900.—The Second N.Z. Contingent (258 officers and men) left for South Africa in s.s. "Waiwera."
Feb. 5, 1900.—Hon. Thomas Dick died.
Feb. 17, 1900.—The Third N.Z. Contingent (264 officers and men) left for South Africa in s.s. "Knight Templar."
March 24 and 31, 1900.—The Fourth and Fifth Contingents (1,060 officers and men) left for South Africa in s.s.'s "Monowai," "Gymeric," "Waimate," and "Maori."
June 28, 1900.—"Bubonic Plague Prevention Act, 1900," passed.
Aug. 8, 1900.—"Immigration Restriction Act, 1899," assented to by Her Majesty in Council, came into operation.
Oct. 13, 1900.—Public Health Act passed.
Oct. 18, 1900.—The Maori Councils Act passed.
Oct. 20, 1900.—"The Representation Act, 1900," passed, increasing number of European representatives to seventy-six.
Dec. 29, 1900.—Hon. Sir James Prendergast, Kt., appointed Deputy-Governor.
Jan. 1, 1901.—Universal penny postage adopted by New Zealand.
Jan. 22, 1901.—Queen Victoria died.
Jan. 28, 1901.—Accession of King Edward VII. proclaimed in New Zealand.
Jan. 30, 1901.—Sixth N.Z. Contingent (578 officers and men) sailed for South Africa in s.s. "Cornwall."
Feb. 21, 1901.—Appointment of Mr. Theo. Cooper as a Judge of the Supreme Court.
March 31, 1901.—General census of the Colony taken for Sunday night.
April 6, 1901.—Seventh N.Z. Contingent (600 officers and men, roughriders) sailed for South Africa, per s.s. "Gulf of Taranto."
May 22, 1901.—Deceased Husband's Brother Marriage Act came into operation after Royal assent.
June 10, 1901.—Duke and Duchess of Cornwall and York arrived in New Zealand.
June 10, 1901.—Boundaries of Colony extended to include Cook and other Pacific Islands.
Aug. 6, 1901.—Sir John McKenzie, K.C.M.G., died.
Nov. 7, 1901.—State Coal-mines Act passed.
Feb. 1, 1902.—North Island division of the Eighth N.Z. Contingent sailed from Auckland for South Africa per s.s. "Surrey."
Feb. 8, 1902.—South Island division of the Eighth Contingent sailed from Lyttelton per s.s. "Cornwall."
March 12, 1902.—South Island division of the Ninth N.Z. Contingent sailed from Port Chalmers for South Africa per s.s. "Kent."

March 19, 1902.—North Island division of the Ninth Contingent sailed from Auckland per s.s. "Devon."

April 14, 1902.—North Island division of the Tenth N.Z. Contingent sailed from Auckland for South Africa per s.s. "Drayton Grange."

April 14, 1902.—Right Hon. R. J. Seddon sailed for London to attend Conference of Colonial Premiers, and to represent New Zealand at His Majesty the King's Coronation.

April 19, 1902.—South Island division of the Tenth Contingent sailed for South Africa per s.s. "Norfolk."

June 26, 1902.—Death of Most Rev. Bishop William Garden Cowie, Primate of New Zealand.

Aug. 9, 1902.—Celebration in New Zealand on the occasion of the Coronation of His Majesty King Edward VII.

Aug. 1902.—Return of N.Z. troopers from South Africa (Eighth Contingent left Durban 5th July; Ninth, 9th July; Tenth, 15th July).

Nov. 12, 1902.—General Assembly dissolved.

Nov. 25, 1902.—General Election of Members of House of Representatives.

Dec. 8, 1902.—Pacific (all red) Cable-service opened for international business.

Dec. 31, 1902.—Export of frozen-meat for year valued at £2,718,763.

Dec. 31, 1902.—Export butter and cheese for year valued at £1,369,341.

Feb. 8, 1903.—Hon. W. Rolleston died.

Mar. 16, 1903.—Sir George Whitmore, K.C.M.G., died.

May 22, 1903.—Mahuta Tawhiao Potatau te Wherowhero (formerly known as the Maori King), summoned to the Legislative Council, and sworn in as a member of the Executive Council of the Colony.

May 24, 1903.—Empire Day proclaimed in New Zealand (anniversary of birth of late Queen Victoria).

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STATISTICAL SUMMARY OF THE COLONY OF NEW ZEALAND FOR THE YEARS 1840 TO 1852 (INCLUSIVE).

Year.	Population of European Descent (excluding the Military and their Families.) *	Trade.		Revenue and Expenditure.						
		Imports	Exports.	Revenue from Customs.	Revenue from Land Sales and Crown Lands.	Revenue from Post Office, Fees, Fines, Licenses, and other Incidental Sources.	Total Revenue from Previous Sources.	Parliamentary Grant, or Receipts in aid of Revenue.	Appropriations from the Commissariat Chest for Military and Naval Expenditure.†	Total Expenditure.
	Persons.	£	£	£	£	£	£	£	£	£
1840	2,050	..	..	926	..	..	926	..	..	926
1841	5,000	85,662	10,836	6,407	28,540	2,443	37,390	43,347	804	81,541
1842	10,992	166,783	18,670	18,568	11,723	2,298	32,589	17,494	1,426	51,509
1843	11,848	191,207	53,945	16,241	1,613	3,544	21,398	9,562	8,093	39,053
1844	12,447	111,619	49,647	11,099	405	2,445	13,949	30,815‡	9,782	54,546
1845	12,774	116,980	76,911	8,899	155	3,845	12,899	..	200,000	212,899
1846	13,274	155,478	82,656	21,319	615	4,711	26,645	35,673‡	190,000	252,318
1847	14,477	202,355	45,485	36,472	835	5,958	43,265	37,752	153,038	234,055
1848	17,166	233,844	44,215	38,366	3,337	5,779	47,482	36,000	155,653	239,135
1849	19,343	254,679	133,662	41,931	3,600	4,877	50,408	20,000	151,455	221,863
1850	22,108	..	..	43,612	8,559	7,127	52,298	41,730	131,100	232,128
1851	26,707	..	..	49,208	12,261	5,580	67,049	20,000	110,600	197,649
1852	27,633	..	..	56,527	14,281	10,936	75,764	10,000	91,600	177,364

* The Maori population was estimated at 56,400 persons in the year 1853. † The data are drawn from several official sources, and the information is only approximate. ‡ Raised by debentures at different issues.

The following are particulars respecting the European population, their cultivations, and live stock for the year 1851:—

Religious Denominations.—Church of England, 14,179 persons; Presbyterians, 4,124; Wesleyans, 2,529; Primitive Methodists, 226; Independents, 333; Baptists, 400; Unitarians, 74; Lutherans, 186; Quakers, 8; Protestants not specifically defined, 614; Roman Catholics, 3,473; Jews, 65; refused to state, 496.

Education.—Could not read, 7,818 persons; read only, 4,353; read and write, 14,536.

Land in Cultivation.—Acres—in wheat, 5,514; barley, 1,329; oats, 2,324; maize, 259; potatoes, 2,256; grass, 15,589; gardens or orchard, 1,188; other crops, 679: total under crop, 29,140 Acres fenced, 90,025.

Live Stock.—Horses, 2,890; mules and asses, 60; cattle, 34,787; sheep, 233,043; goats, 12,121; pigs, 16,214.

STATISTICAL SUMMARY OF THE COLONY OF NEW
(For Summary, Years 1840 to 1852,

Year.	Population (exclusive of Maoris), on 31st December.			Births.	Deaths.	Marriages.	Crown Lands.* (See note as to terms required for purposes of [illegible] settlement.)												Occupied and Cultivated Holdings (Including Home Orchard) Not Exceeding One Acre in Extent.	Land (Including Town Gardens) under Cultivation.	Horses.	Horned Cattle.
							Years ending 30th June.			Years ending 31st December.												
	Males.	Females.	Totals.				Waste Lands sold or Leased.	Land Tax.	Cash received.	Lands finally alienated under the Deferred-payment System.	Free Grants.*	Land taken up.	Let on Perpetual Lease.			Held under Occupation Licenses.	Total.	Under Pre-emption Claims.	Improved Farms.	Special or Leased Auriferous Claims.	Small Grazing Farms and Grazing Runs.		
													In Occupation on 31 Dec.	Under Occupation with Right of Purchase.								
							Acres.	£	£	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Number.	Acres.		
1833	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1834	17,914	14,640	32,554	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1835	20,781	16,412	37,192	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1836	23,356	20,184	43,540	1,722	406	304	51,972	33,186	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...	...
1837	27,600	22,196	49,800	1,966	434	364	141,139	79,966	...	...	...	6,169	...	...	...	...	...	...	...	...	...	121,648	...	...
1838	33,609	25,734	59,413	2,072	582	534	239,128	150,839	...	...	...	6,277	...	...	...	...	...	...	...	...	...	141,007	14,961	137,109
1839	41,207	30,486	71,593	2,647	704	660	477,021	222,855	...	...	...	43,750	...	...	...	...	...	...	...	...	...	156,940	...	...
1840	47,197	34,312	81,509	2,711	1,047	750	564,133	284,433	...	...	...	47,206	...	...	...	...	...	...	...	...	...	...	...	...
1841	62,082	37,939	97,021	3,445	1,105	878	449,158	283,305	...	...	...	18,834	...	...	...	...	...	...	...	...	...	226,622	28,275	193,263
1842	79,606	46,133	125,614	4,064	1,403	1,001	550,337	306,668	...	...	...	40,332	...	...	...	...	...	...	...	...	...	...	...	...
1843	105,978	58,970	164,948	5,113	1,582	1,183	599,437	380,998	...	...	...	66,853	...	...	...	...	...	...	...	...	...	...	...	...
1844	106,580	63,578	170,158	6,301	2,191	1,278	601,174	393,638	...	...	...	47,198	...	...	...	...	...	...	...	...	...	382,633	49,409	249,760
1845	117,586	73,233	190,819	6,934	2,532	1,408	503,112	341,994	...	...	...	60,681	...	...	...	...	...	...	...	...	...	...	...	...
1846	125,090	79,934	205,024	8,466	2,340	1,478	605,466	528,048	...	...	...	53,973	...	...	...	...	...	...	...	...	...	...	...	...
1847	132,999	86,739	219,668	9,318	2,709	1,009	588,917	587,436	...	...	...	46,703	...	...	...	...	...	...	...	...	...	696,909	85,715	342,853
1848	154,611	91,807	246,418	9,387	2,869	1,085	259,309	189,065	...	...	...	42,209	...	...	...	...	...	...	...	...	...	783,435	...	...
1849	149,112	97,137	247,249	9,718	2,721	1,031	113,311	115,941	...	...	...	143,449	...	...	...	...	...	...	...	...	...	13,476	997,477	...
1850	145,772	102,668	248,440	10,277	2,753	1,141	59,766	88,419	...	...	...	137,458	...	...	...	...	...	...	...	...	...	10,511	1,134,918	...
1851	150,431	110,535	260,966	10,392	2,642	1,264	52,642	110,973	...	...	...	183,796	...	...	...	...	...	...	...	...	...	14,874	1,226,222	81,628
1852	162,409	117,136	279,569	10,795	3,190	1,273	358,336	189,977	...	...	...	183,673	...	...	...	...	...	...	...	...	...	15,304	1,419,933	...
1853	179,406	123,540	302,946	11,722	3,645	1,270	360,143	280,758	...	...	...	184,541	...	...	...	...	...	...	...	...	...	15,883	1,631,712	...
1854	194,349	147,511	341,860	11,844	3,462	1,828	648,300	800,471	...	...	...	238,562	...	...	...	...	...	...	...	...	...	16,092	1,943,653	99,161
1855	213,494	162,560	376,880	12,436	3,704	2,109	318,282	448,697	...	...	...	246,335	...	...	...	...	...	...	...	...	...	17,256	2,377,407	...
1856	241,139	173,402	414,541	13,168	3,968	2,146	497,416	846,832	...	...	...	32,143	...	...	...	...	...	...	...	...	...	18,720	2,940,731	...
1857	225,681	180,937	406,618	16,836	4,595	2,124	577,302	1,324,490	...	...	...	40,324	...	...	...	...	...	...	...	...	...	20,519	3,523,277	...
1858	240,603	191,809	432,412	17,370	4,643	2,277	647,667	1,454,893	79,324	...	...	54,861	...	...	...	...	...	...	...	...	...	21,048	3,991,906	137,768
1859	257,899	205,833	463,732	18,079	5,381	2,322	539,253	146,733	...	...	...	37,923	...	...	...	...	...	...	...	...	...	23,129	4,306,889	...
1860	268,364	216,500	484,864	19,341	5,437	2,187	151,798	184,488	18,976	...	...	41,972	...	...	...	...	...	...	...	...	...	24,147	4,768,192	...
1861	274,286	225,684	500,210	18,732	5,826	2,277	52,177	132,230	39,422	...	...	130,650	...	...	...	...	...	...	...	...	...	26,298	5,189,284	161,736
1882	283,305	234,404	517,707	19,009	5,701	2,600	13,322	209,004	27,487	122,100	...	...	...	...	...	...	...	...	...	...	...	27,352	5,651,553	...
1863	294,605	246,214	540,877	19,803	6,060	2,612	113,500	141,251	24,699	131,611	26,786	28,364	...	...	...	...	...	...	...	...	...	28,387	6,072,949	...
1864	306,660	257,630	564,290	20,340	6,740	2,800	134,258	96,262	29,062	131,611	20,973	41,362	...	...	...	...	...	...	...	...	...	29,814	6,450,300	190,951
1865	312,125	263,101	575,226	19,693	6,661	2,813	59,513	84,382	34,637	456,080	24,441	51,767	...	...	...	...	...	...	...	...	...	31,763	6,608,602	...
1866	321,153	273,400	594,553	19,799	6,748	2,796	48,820	90,307	38,504	185,704	30,3508	54,970	...	...	...	...	43,8734	109,837	...	...	...	33,332	6,845,177	187,582
1867	324,558	278,803	603,361	19,335	6,137	2,583	154,330	18,496	316,482	72,401	150,218	...	...	...	...	...	14,3494	138,463	...	...	...	34,743	6,984,750	...
1868	324,948	282,431	607,380	18,902	5,708	2,617	64,896	58,379	233,630	142,355	205,373	322,495	...	...	...	...	19,0054	161,629	...	...	...	35,747	7,670,167	...
1869	328,180	287,404	615,584	19,163	5,613	2,619	47,659	24,573	66,708	118,276	44,778	60,798	...	...	...	...	4,9204	65,698	...	...	...	36,178	8,013,486	...
1870	334,557	291,031	625,588	18,478	5,994	2,797	96,479	108,039	96,808	133,761	289,7415	798,371	...	...	...	...	724	80,148	...	...	...	36,983	8,580,852	...
1871	339,174	297,584	634,058	18,373	6,312	3,005	93,568	93,201	209,432	283,440	1,003,405	1,281,407	...	...	...	...	1,6038	119,464	41,224	8,893	225	111,040	8,311,851	237,851
1872	345,146	305,282	650,428	19,477	6,479	3,069	54,156	41,726	225,208	125,194	2,188,167	54,271	212,805	...	...	...	1,5378	214,996	42,766	9,713,741	...	...	...	...
1873	357,835	314,630	672,465	18,187	6,707	4,115	36,773	36,786	44,779	196,343	3,8545	1,100,537	108,134	252,790	...	...	68,8504	529,693	45,290	10,063,951	...	...	581,206	...
1874	363,763	322,305	686,068	18,348	6,912	4,179	47,013	53,577	89,3164	1,263	864,2185	75,301	156,026	9,731	51,306	117,845	...	46,676	10,128,076	...	...	...	364,934	...
1875	369,276	328,507	697,783	18,110	6,984	4,210	52,1873	64,211	84,1774	1,263	1,1,1,1	84,1,1	1,1,1	8,1,1	1,1,1	1,1,1	...	1,1,1	10,1,1	237,418	1,1,1	1,1,1	1,1,1	1,1,1	...
1876	376,967	337,175	714,182	19,617	6,431	4,043	31,1850	20,8251	57,0151	23,2315	9,1065	832,0482	391650	1,1,1,1	4,1,1,1	28,1,1,1	...	58,1,1,1	10,1,1,1	249,1,1,1	1,1,1	1,1,1	1,1,1	...
1877	384,333	344,333	728,666	19,287	6,395	4,326	27,5,1,1	23,5,1,1	25,5,1,1	9,5,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...	1,1,1,1	10,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...
1878	394,124	354,124	748,248	19,791	6,782	4,326	26,1,1,1	26,1,1,1	29,5660	4,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...	1,1,1,1	10,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...
1879	398,629	357,846	756,475	18,833	7,680	3,984	23,9405	21,0975	26,3705	8043	156,183	142,272	103,348	7,3532	3/	135,109	82,4834	124,474,111	261,931	1,222,139	...	...	...	...
1880	403,364	364,364	767,728	19,587	7,860	3,984	58,1745	34,0194	24,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...	1,1,1,1	10,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...
1900	414,321	371,431	785,752	19,491	7,514	5,064	27,2,1,1	24,0,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...	1,1,1,1	10,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...
1901	425,396	381,201	807,597	20,613	8,377	6,304	27,2,1,1	24,0,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...	1,1,1,1	10,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	1,1,1,1	...

* The waste or Crown lands sold or granted in each year prior to 1856 cannot be accurately stated. The total gross quantity of land disposed of by Crown grants up to the end of March, 1903, including both lands sold and grants for public purposes, reserves, and old land-claims also, from the year 1829, grants to Natives under the provisions of the Native Land Acts, to 31st March, 1903, is 15,133,000 acres. In 1894 rules were laid down for Corrected by results of census taken in April, 1891. ‡ Financial year ended 31st March of the year following. † The population of the colony (other than Maoris) according to the census of 31st March, 1901, was 772,719; railways; there are, besides, 113 miles of private lines. ‡ Under deferred-payment system. § Held under perpetual lease. ¶ Area included previously as held under lease in perpetuity, and occupation with right

NOTE.—The area acquired by the Board under the Land for Settlements Acts to 31st March, 1903, was 600,855 acres, of which 447,134 acres were under lease to 9,335 selectors, 8,338 acres occupied by roads and reserves, 19,541

Year.	Exports (the Produce of New Zealand).																						Imports.		Excess of Exports over Imports.
	Wool.		Grain.		Flower Mills.		Butter.		Cheese.		Flax (Phormium).		Oil.		Gum (Kauri).		Provisions, Tallow, Timber, &c.		Total Value.		Total Value.		Coin and Bullion.	Coin and Bullion.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Tons.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.					Tons.		
	Lb.	£	Bushels.	£	Cwt.	£	Cwt.	£	Cwt.	£	Tons.	£	Qr.	£	Tons.	£	£	£	£	£	£	£	Tons.	£	£
1853	1,071,340	66,507	59,959	19,943	...	...	1,039	7,307	898	2,092	46	1,046	...	...	829	13,561	180,107	363,272	307,827	...	...	...	...	...	...
1854	1,254,360	78,609	63,000	16,809	...	...	697	5,300	619	975	58	1,160	...	...	1,660	28,869	179,967	330,580	330,580	...	...	...	...	...	...
1855	1,772,344	93,104	139,332	82,302	...	...	785	5,700	490	2,163	730	4,674	...	...	355	4,512	173,324	365,807	813,460	...	...	...	...	...	...
1856	2,359,618	146,050	66,130	24,035	...	...	647	5,257	290	1,414	92	552	...	...	1,440	18,592	123,537	318,433	710,868	...	...	...	...	...	...
1857	2,648,156	167,579	81,757	29,656	...	...	384	2,702	549	1,618	38	380	10,438	48,442	1,200	15,600	87,527	265,377	974,074	...	...	...	...	...	...
1858	3,820,372	254,922	71,403	20,680	...	...	232	2,830	934	3,095	64	1,526	13,333	52,443	2,810	20,036	78,419	433,949	1,241,273	...	...	...	...	...	...
1859	3,096,732	239,779	118,740	39,206	...	...	239	3,328	1,067	4,296	77	1,793	7,335	28,427	2,210	20,776	81,833	421,308	1,551,090	...	...	...	...	...	...
1860	4,665,160	344,191	51,863	15,112	...	...	1,008	8,623	810	3,112	66	1,240	12,425	47,746	1,048	9,351	52,795	349,133	1,490,134	...	...	...	...	...	...
1861	5,855,900	523,728	8,118	2,518	...	...	25	126	404	1,844	4	43	264,234	752,667	896	9,888	48,437	1,339,241	2,493,811	...	...	...	...	...	...
1862	9,839,260	874,226	6,002	1,822	...	...	Butter and cheese not separately given				13	260	420,864	1,594,369	1,103	11,107	77,133	2,358,020	4,628,084	...	...	...	...	...	...
1863	9,842,180	875,193	13,838	4,138	...	...	for years 1862 to 1865. The total ex-				13	231	760,458	2,879,742	1,200	12,000	87,087	3,812,765	4,234,674	...	...	...	...	...	...
1864	16,691,666	1,070,997	3,580	722	...	...	port for this period was 617 cwt., value				7	170	480,171	1,757,845	2,225	60,390	59,084	1,950,634	7,900,655	...	...	...	...	...	...
1865	19,180,500	1,241,761	23,447	6,398	...	...	£2,936.				3	75	574,574	2,202,474	1,207	46,060	84,729	3,303,421	5,394,977	...	...	...	...	...	...
1866	18,810,776	1,234,127	2,000	1,296	13	65	43	995	733,586	2,700,271	5	533	769,574	2,950,574	1,167	39,524	116,167	3,926,097	6,109,134	...	...	...	...	...	...
1867	21,152,366	1,380,698	158,811	36,980	58	290	90	1,260	1,426	600,753	8,700,273	...	...	...	2,685	77,497	89,894	4,479,464	5,344,607	...	...	...	...	...	...
1868	28,573,454	1,871,238	1,000	338	138	552	535	2,140	534	8,137	637,474	2,564,111	...	...	2,690	72,493	51,301	4,268,762	4,965,748	...	...	...	...	...	...
1869	27,765,676	1,871,230	500,536	96,441	...	...	2,769	18,879	6,339	20,000	2,044	43,145	611,428	2,447,697	2,850	111,300	80,097	4,909,134	4,476,126	...	...	...	...	...	...
1870	37,930,763	1,703,944	884,299	147,133	...	...	3,435	12,095	2,735	9,327	3,471	132,376	544,880	2,137,560	1,391	175,074	112,044	4,544,582	4,639,015	...	...	...	...	...	...
1871	37,093,754	1,660,114	1,005,458	167,576	...	...	4,342	12,426	1,619	4,023	4,248	96,611	730,260	2,177,320	1,054	185,958	158,335	4,172,104	4,058,193	...	...	...	...	...	...
1872	41,886,097	2,537,919	1,058,480	178,886	...	...	1,760	4,462	1,361	3,379	3,080	90,406	443,320	1,730,692	1,833	85,816	412,600	5,477,970	6,464,087	...	...	...	...	...	...
1873	41,335,183	2,702,477	508,431	136,842	...	...	722	1,344	1,993	6,605	6,454	143,790	503,137	1,997,457	1,833	85,816	412,600	5,477,970	6,464,087	...	...	...	...	...	...
1874	46,846,553	3,124,603	1,161,317	311,103	...	...	1,168	1,168	4,468	2,678	1,693	128,625	37,699	158,334	2,368	79,986	397,761	5,152,143	5,469,611	...	...	...	...	...	...
1875	54,491,540	3,396,155	1,176,097	232,417	...	...	504	660	442	1,862	639	21,741	553,162	1,997,770	1,833	85,816	412,600	5,477,970	6,464,087	...	...	...	...	...	...
1876	59,833,454	3,393,826	1,172,098	237,878	...	...	877	3,910	883	3,488	897	18,281	328,367	1,206,559	2,888	109,234	351,731	5,478,901	6,965,173	...	...	...	...	...	...
1877	64,481,374	3,803,610	1,161,317	270,435	...	...	1,580	5,458	4,990	18,193	1,093	28,625	1,000,000	3,680,000	3,032	138,348	469,601	5,470,236	6,824,112	...	...	...	...	...	...
1878	59,870,256	3,091,307	2,121,814	308,767	...	...	3,186	12,111	3,919	9,368	623	10,666	311,437	1,141,199	1,833	85,816	412,600	5,477,970	6,464,087	...	...	...	...	...	...
1879	62,220,810	3,126,439	3,470,344	660,355	...	...	539	1,632	172	628	445	7,303	384,100	1,134,641	3,228	147,335	484,137	5,561,455	6,374,585	234,218	...	...	...	...	...
1880	68,880,176	3,780,009	3,294,000	594,717	...	...	2,157	5,390	1,983	7,264	1,583	13,617	393,100	1,445,000	4,775	214,837	544,973	6,200,330	6,611,011	599,303	...	...	...	...	...
1881	59,415,040	2,909,760	3,815,960	986,029	...	...	2,436	8,496	1,058	6,112	1,308	26,285	350,665	990,800	3,490	153,578	374,880	5,761,250	5,457,045	337,462	...	...	...	...	...
1882	64,382,707	3,118,154	4,310,984	997,381	15,241	19,324	2,584	8,553	10,130	2,040	41,955	290,693	331,604	1,221,690	3,533	160,309	321,290	6,253,350	8,609,270	378,272	...	...	...	...	...
1883	68,448,240	3,422,412	3,000,000	1,020,000	13,298	18,618	2,800	8,960	1,200	3,600	1,000	8,000	1,478,800	4,809,220	3,472	144,240	353,000	6,374,232	8,724,587	404,355	...	...	...	...	...
1884	81,130,028	3,967,557	5,489,835	766,624	354,000	345,990	13,766	60,395	10,342	43,074	1,525	23,473	246,300	898,473	6,303	324,151	1,116,799	6,948,466	7,665,888	480,831	...	...	...	...	...
1885	86,307,431	3,265,975	1,507,645	313,697	206,431	173,857	34,903	102,367	15,245	55,747	1,063	16,316	222,732	790,195	5,870	299,762	1,154,819	6,391,811	7,479,921	311,063	...	...	...	...	...
1886	90,513,741	3,097,977	1,284,000	267,192	181,198	151,991	16,000	47,000	16,000	56,000	1,111	15,121	200,000	720,000	4,200	215,250	1,080,000	6,953,563	7,687,804	534,152	...	...	...	...	...
1887	88,844,972	3,121,025	1,126,836	247,704	407,107	455,379	17,011	51,911	21,013	74,292	1,778	25,004	157,716	568,377	6,690	283,434	1,082,468	6,451,661	7,411,215	568,209	...	...	...	...	...
1888	83,242,133	3,114,554	2,102,103	462,463	1,000,000	1,120,000	18,000	58,000	19,000	68,000	2,000	30,000	160,000	576,000	6,000	300,000	1,200,000	6,729,017	7,297,685	568,668	...	...	...	...	...
1889	100,202,272	3,753,842	2,000,000	440,000	1,000,000	1,120,000	18,000	58,000	19,000	68,000	2,000	30,000	160,000	576,000	6,000	300,000	1,200,000	6,729,017	7,297,685	568,668	...	...	...	...	...
1890	101,827,077	4,150,299	8,287,004	1,030,415	898,944	1,067,637	34,618	124,201	40,431	84,986	22,258	284,769	187,641	761,200	7,438	378,863	1,440,731	9,488,761	8,260,325	637,397	...	...	...	...	...
1891	108,374,152	4,332,966	4,675,358	1,000,000	1,000,000	1,120,000	18,000	58,000	19,000	68,000	12,809	281,512	187,641	761,200	7,438	378,863	1,440,731	9,488,761	8,260,325	637,397	...	...	...	...	...
1892	118,180,014	4,373,307	6,605,585	810,272	899,944	1,013,357	13,196	57,180	42,493	91,042	12,793	214,347	237,203	951,963	8,795	367,696	1,206,573	9,365,868	8,043,056	673,315	...	...	...	...	...
1893	109,779,684	3,774,238	4,858,288	583,390	903,830	1,018,307	20,749	84,643	46,201	99,026	12,587	209,375	227,802	915,141	8,317	310,773	1,113,799	8,557,443	8,911,215	691,348	...	...	...	...	...
1894	144,095,124	4,824,193	5,466,184	1,243,211	1,004,363	1,131,410	18,727	73,454	115,903	259,161	9,677	161,256	241,614	966,456	8,338	404,887	1,121,133	9,813,548	8,776,880	1,036,668	...	...	...	...	...
1895	116,015,379	3,862,134	1,381,827	215,293	1,134,027	1,302,711	15,964	227,601	76,743	150,909	1,806	21,040	293,193	1,161,188	7,403	418,706	1,261,931	7,390,253	6,400,129	726,624	4,536,914	1,814,765	2,721,149	1,088,459
1896	129,156,624	4,391,845	1,941,824	340,047	1,163,307	1,291,992	21,353	282,116	71,374	130,166	2,868	34,965	263,694	1,041,468	7,126	431,243	1,260,680	9,177,136	7,137,190	792,841	4,792,708	2,084,468	2,708,240	623,772
1897	132,815,112	4,512,115	1,719,887	435,490	1,190,686	1,322,984	20,000	270,000	70,000	120,000	2,000	30,000	260,000	1,040,000	7,000	420,000	1,260,000	9,259,987	8,033,483	1,226,504	5,033,483	3,033,483	2,000,000	1,033,483
1898	149,385,813	4,845,894	1,045,980	136,120	1,351,773	1,502,770	26,801	203,560	68,721	135,776	4,850	74,550	280,135	1,080,603	9,905	586,767	1,561,834	10,324,968	8,230,000	907,035	5,235,286	2,284,251	2,951,035	666,784
1899	147,169,497	4,324,009	1,265,877	164,564	1,505,877	1,688,150	26,000	327,799	69,446	141,818	10,371	184,442	269,370	1,031,100	11,116	667,019	1,645,313	11,179,746	8,739,633	975,234	5,992,686	3,017,053	2,975,633	41,420
1900	160,417,600	4,812,528	1,000,000	130,000	1,500,000	1,680,000	25,000	320,000	70,000	143,000	11,000	330,000	270,000	1,080,000	10,100	707,095	1,764,230	11,176,853	9,006,096	1,170,757	6,177,091	3,006,334	3,170,757	164,423
1901	160,220,909	4,806,103	1,323,315	1,282,811	1,657,345	1,833,160	30,201	882,406	104,294	358,265	10,171	195,726	451,538	1,733,584	7,541	446,114	1,933,567	12,690,460	11,817,951	1,277,630	6,132,830	4,855,200	1,277,630	3,577,570
1902	160,419,043	3,456,583	1,803,562	586,546	1,631,853	1,713,763	253,098	1,005,802	74,746	163,329	20,853	334,031	567,832	1,931,426	7,418	450,213	2,333,709	13,498,309	11,588,724	1,361,702	6,447,139	5,085,437	1,361,702	3,723,735

* Post-Office Savings-Banks were first opened in 1867. † Statistics of schools and scholars not being complete for years prior to 1874, no figures are entered. ‡ In addition to § There was in March, 1901, an accrued sinking fund amounting to £4,313,139, leaving a net indebtedness of £33,385,786. ‖ Excluding Maoris. ¶ An accident-insurance branch was opened on 7th June, 1899, was £3,124; in 1900, £137,095; in 1901, £197,853; in 1902, £208,509; and in 1903 £202,156.

a Financial year ended 31st March of year following. b During the last twelve years the Public Works Fund has been assisted by contributions from the revenue of the Consolidated Fund to the extent of £1,403,000: the £425,000; in 1899-1900, £450,000; in 1900-1901, £500,000; in 1901-1902, £300,000; in 1902-1903, £290,000. Further receipts in aid have been given since the year 1870 by way of contributions of stamp duties, release of sinking

Public Trust Office.				Government Valuation of Land and	
Nature of Business.	1901. Number of Estates.	1902. Value of Estates.		In Counties.	
		£		£	
Wills and trusts (including sinking funds accounts)	744	1,279,743	Unimproved value, 1901	36,057,894	Unimproved
Intestate estates	962	197,398	1891	37,880,139	
Real estates	77	7,585			
Lunatic estates	80	130,563	Increase	18,217,660	Inc
Native reserves	143	355,000			
West Coast Settlement Reserves	212	655,000	Value of Improvements, 1901	37,028,304	Value of im
Unclaimed lands	153	21,504	1891	27,642,733	
Total	3,364	2,706,783	Increase	9,106,189	Inc

TEALAND FROM 1853 TO 1902 INCLUSIVE.

(... separate sheet.)

Posts:						Electric Telegraph.			Miles of Railway.			Shipping.					
												Inwards.		Outwards.		Registered Vessels belonging to the Colony.		Year.
Stamps.	Pkgs.	Letters received and despatched.	Newspapers received and despatched.	Postal Revenue.	Money Orders issued.	Amount of Money Orders issued.	Miles of Line.	Number of Messages.	Cash and Cash Values, including Telephones.	Open for Traffic.	Under Construction.	Railway Receipts.	Number of Vessels.	Tonnage.	Number of Vessels.	Tonnage.	Number of Vessels.	Gross Tonnage.	
		Number.	Number.	£	Number.	£			£			£							
		119,090	177,583	..	..	..	..	..	..	..	..	..	238	65,504	229	62,891	..	..	1853
		138,482	201,381	..	..	..	..	..	..	..	..	..	293	74,831	293	76,718	..	..	1854
		174,407	238,522	..	..	..	..	..	..	..	..	..	378	88,614	341	89,825	..	..	1855
		196,706	271,254	..	..	..	..	..	..	..	..	..	323	82,991	323	82,991	..	..	1856
1,843,324	49,734	337,721	498,163	..	..	..	..	..	..	..	..	..	438	136,580	283	76,524	186	6,662	1857
		384,856	564,348	6,024	..	..	..	..	..	..	..	..	458	136,580	358	140,293	238	8,527	1858
		707,870	830,385	7,822	..	..	..	..	..	..	..	..	398	149,278	346	205,852	252	9,144	1861
		890,369	1,029,336	10,068	..	..	..	..	..	..	..	..	596	197,598	513	288,647	287	10,825	1862
4,761,383	43,270	1,236,768	1,448,174	14,108	..	..	..	..	..	..	..	..	813	302,958	704	394,665	343	15,189	1863
		1,624,232	2,064,123	22,710	1,410	56,203	..	..	..	..	..	..	1,154	419,023	1,094	304,665	413	23,963	1864
		3,403,248	3,397,669	32,329	11,386	78,356	..	..	..	..	..	..	1,127	426,004	1,089	433,233	423	29,573	1865
4,937,873	61,376	4,151,148	4,398,027	38,302	16,591	78,356	..	..	..	..	..	..	864	295,625	983	383,020	406	32,484	1865
		4,443,573	4,206,966	46,475	17,336	108,779	699	48,831	9,114	..	..	..	1,069	331,899	986	306,979	433	26,787	1866
		4,758,644	4,373,039	49,598	22,710	115,610	774	87,436	14,295	..	..	..	944	399,568	930	398,169	366	23,949	1867
6,418,579	125,184	4,811,240	3,986,888	53,331	24,473	118,411	1,471	134,647	36,224	..	..	..	851	277,103	873	287,710	372	24,539	1868
		4,977,109	3,283,613	57,197	25,854	127,218	1,887	1,304,712	100,023	..	..	..	764	250,732	771	247,764	381	25,990	1869
		5,016,595	3,363,147	58,007	28,427	140,454	1,887	173,746	32,649	..	..	..	736	273,151	766	265,407	384	26,743	1870
		5,643,679	3,889,662	53,780	31,864	152,482	2,315	238,195	37,422	..	..	..	813	301,958	703	265,618	371	27,107	1871
4,700,829	131,460	6,081,697	4,170,784	70,249	36,291	191,098	2,315	369,085	37,203	..	..	..	729	274,813	709	265,366	364	23,963	1872
		6,938,543	4,411,091	94,733	44,660	219,358	2,312	491,205	44,669	..	..	..	775	300,302	704	281,847	411	30,035	1873
		7,915,985	5,209,195	94,706	52,351	219,358	2,830	637,941	54,195	145	434	..	739	289,707	822	383,533	471	38,935	1874
1,674,863	123,741	8,908,456	6,306,693	104,371	59,712	263,604	2,632	844,301	62,322	209	621	21,198	826	399,290	802	417,880	504	42,015	1875
		10,447,851	6,811,277	122,496	73,927	293,431	3,136	993,323	74,420	542	464	72,073	926	416,727	940	483,334	538	44,401	1876
		11,770,737	7,902,748	129,203	80,855	310,468	3,230	1,100,599	80,841	427	469	169,031	878	391,180	840	440,609	533	42,479	1877
3,669,338	207,337	13,554,870	9,066,311	137,169	87,473	342,603	3,397	1,182,955	85,580	1,052	251	569,898	812	358,568	848	438,493	541	46,961	1878
		15,524,761	9,470,366	158,998	101,017	366,233	3,434	1,260,324	92,433	1,089	142	758,096	926	456,496	886	498,253	562	61,437	1879
		20,957,818	10,057,944	141,448	117,999	414,980	3,708	1,448,943	113,351	1,171	284	762,372	894	473,040	928	475,752	563	64,437	1879
		20,957,818	10,057,944	141,448	117,999	465,405	3,788	1,504,713	100,023	1,171	284	836,077	730	395,675	786	424,041	559	66,316	1880
2,965,685	200,083	25,557,931	12,248,043	156,879	133,556	452,182	3,824	1,438,772	101,366	1,333	187	892,026	765	420,134	762	413,487	572	72,387	1881
		30,325,579	13,313,999	168,325	148,162	490,398	3,974	1,570,189	102,378	1,371	171	953,347	795	481,285	852	502,906	594	78,553	1882
		33,588,208	15,099,363	172,665	172,356	541,133	4,164	1,599,420	102,938	1,404	224	961,304	803	494,908	851	507,365	579	84,893	1883
		35,357,846	14,093,040	188,772	180,052	572,666	4,264	1,654,395	101,482	1,479	158	1,045,712	852	529,188	872	534,242	583	92,690	1884
		35,829,855	14,233,878	197,436	188,022	581,305	4,403	1,774,273	112,278	1,613	179	1,047,418	786	519,700	780	513,000	597	95,887	1885
8,364,595	277,901	38,084,592	14,334,047	206,029	155,680	545,715	4,546	1,636,266	115,666	1,721	171	998,768	725	502,374	707	488,439	571	94,796	1886
		39,377,774	15,381,313	213,353	139,579	553,744	4,646	1,835,394	110,811	1,753	169	994,843	653	489,754	657	493,583	557	94,027	1887
		40,398,020	16,202,849	212,247	162,387	553,996	4,790	1,765,860	104,116	1,777	163	997,615	683	526,431	701	531,478	524	86,132	1888
		42,301,233	16,721,016	222,978	172,076	580,549	4,874	1,802,987	106,462	1,809	176	1,095,509	781	602,614	762	593,252	521	84,171	1889
		43,571,200	17,581,734	229,867	180,677	586,427	4,960	1,962,161	120,697	1,842	132	1,141,761	744	662,769	745	646,705	521	98,907	1890
8,148,186	308,812	47,612,864	18,501,912	245,305	195,139	651,190	5,349	1,968,264	117,054	1,869	170	1,115,432	737	618,351	744	655,807	521	102,068	1891
8,330,752	..	50,610,742	18,357,365	252,494	190,438	694,245	5,479	1,904,143	103,813	1,886	188	1,181,522	686	675,231	689	636,100	491	101,196	1892
8,480,669	..	52,085,449	19,008,346	253,457	210,557	750,992	5,513	2,069,791	112,466	1,948	148	1,172,792	617	619,604	635	641,486	509	109,381	1893
8,230,829	..	52,168,336	19,271,590	254,800	222,978	776,753	5,823	2,040,839	114,510	1,993	127	1,150,851	609	631,100	614	631,250	475	99,588	1894
9,826,604	239,778	39,586,919	12,675,973	242,615	243,497	812,004	6,245	2,124,111	123,122	2,014	174	1,183,041	611	622,531	597	648,946	479	100,588	1895
9,318,493	200,853	30,442,053	13,216,321	262,482	269,566	900,021	6,282	2,520,169	129,635	**2,018	124	1,286,158	584	614,097	592	647,659	492	105,533	1896
9,867,954	186,027	31,509,909	14,066,311	264,164	294,697	970,831	6,484	2,696,883	134,779	**2,055	92	1,376,008	600	660,809	592	675,333	506	110,173	1897
9,693,723	193,512	35,614,967	15,995,487	304,947	318,370	1,082,241	6,736	2,900,738	145,295	**1,090	113	1,469,665	620	765,355	622	765,793	518	126,113	1898
11,348,500	239,731	38,484,377	15,717,386	315,301	344,664	1,118,805	6,910	3,469,031	162,945	**1,104	111	1,623,891	609	811,183	604	807,866	522	129,383	1899
9,353,193	184,673	39,124,615	15,747,386	315,301	344,664	1,118,805	6,910	3,469,031	162,945	**1,104	111	1,623,891	609	811,183	604	807,866	522	129,383	1899
10,744,000	224,000	42,000,000	16,000,000	320,000	350,000	1,150,000	6,950	3,500,000	165,000	**1,120	120	1,700,000	620	850,000	610	850,000	525	135,000	1900

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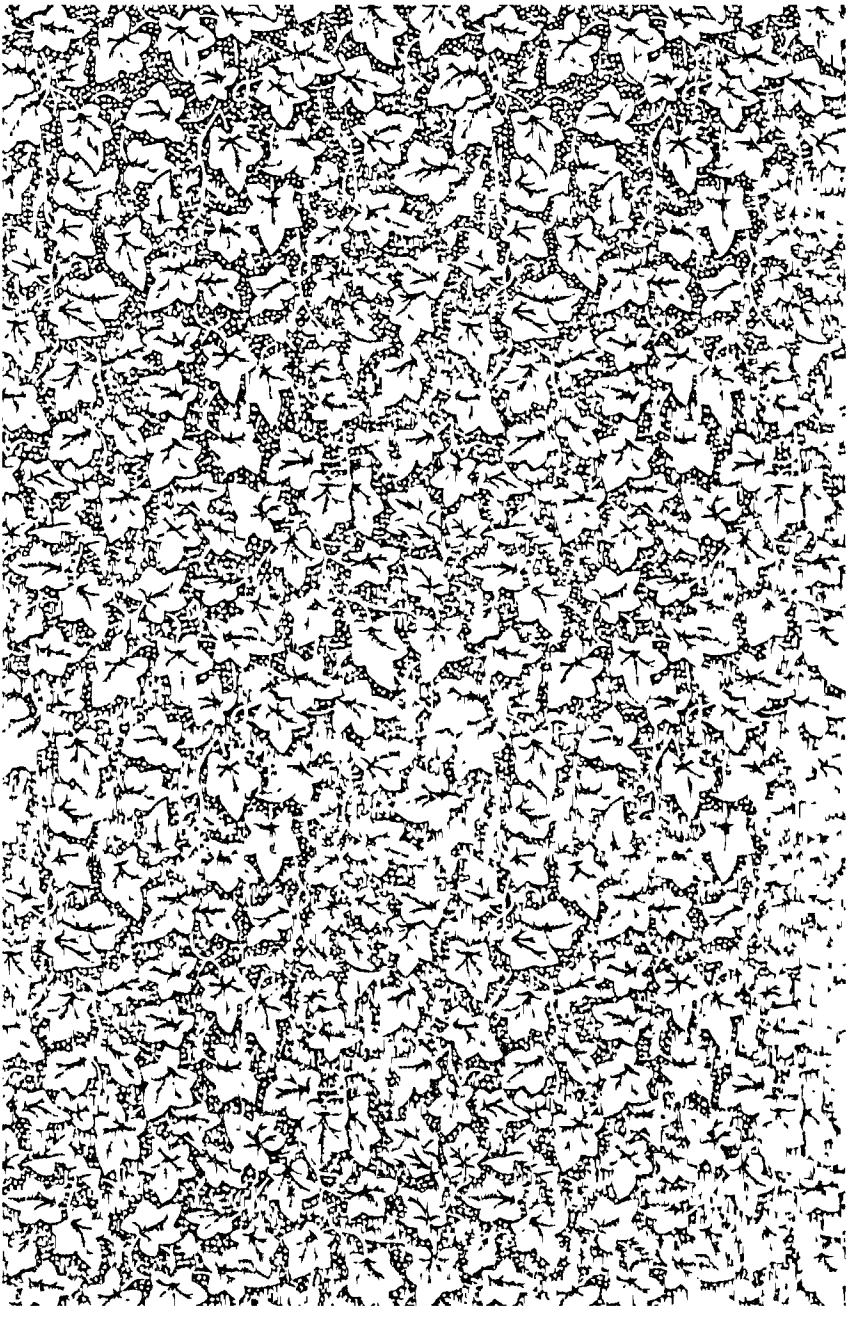

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